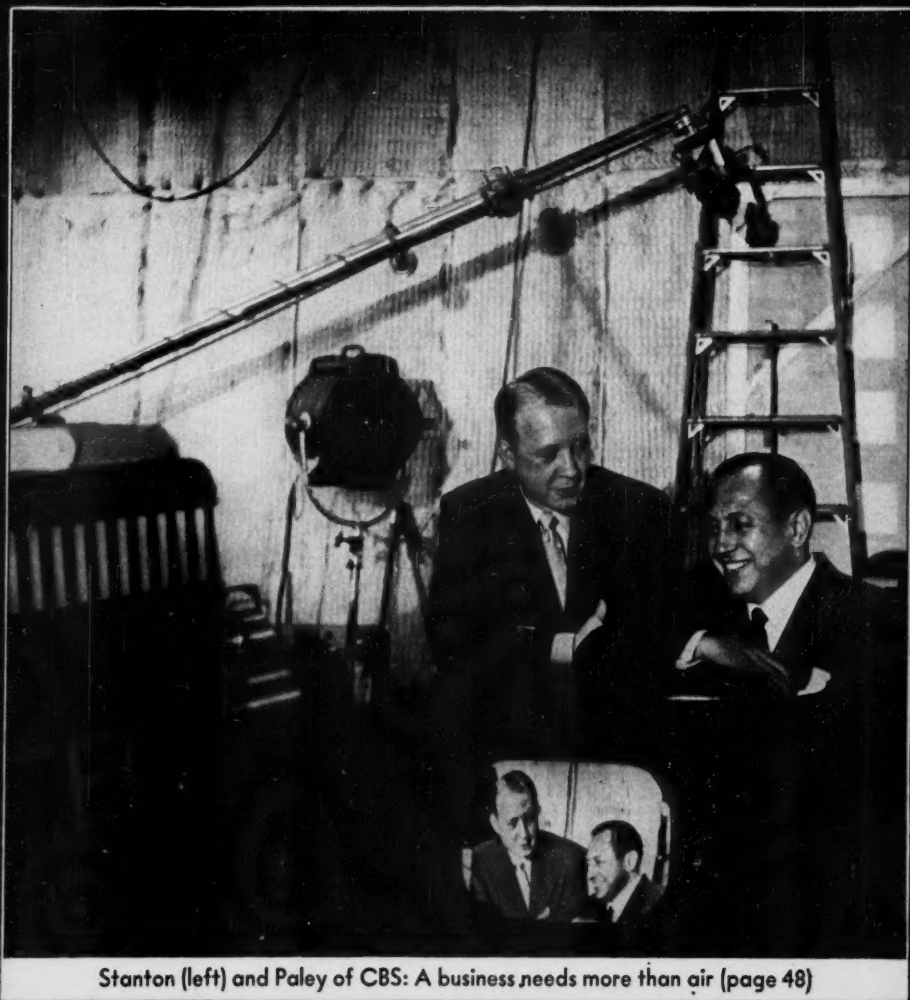
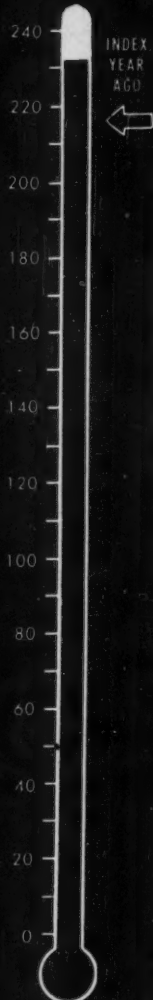


BUSINESS WEEK

HOW SHAKY IS THE
Stock Market

PAGE 102



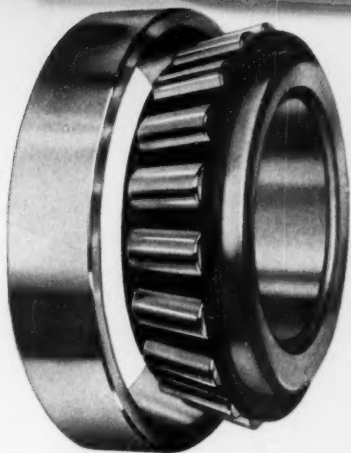
Stanton (left) and Paley of CBS: A business needs more than air (page 48)

A MCGRAW HILL PUBLICATION

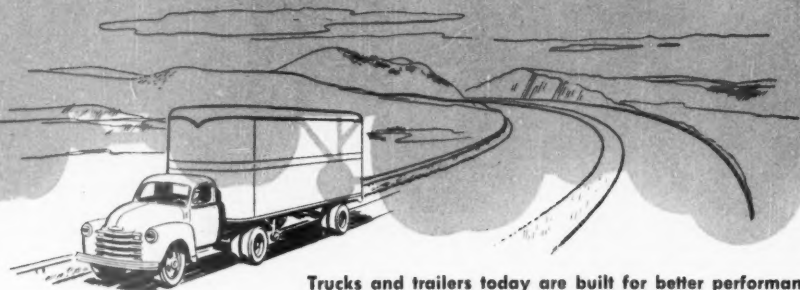
JULY 21, 1951

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THE *BETTER* THE
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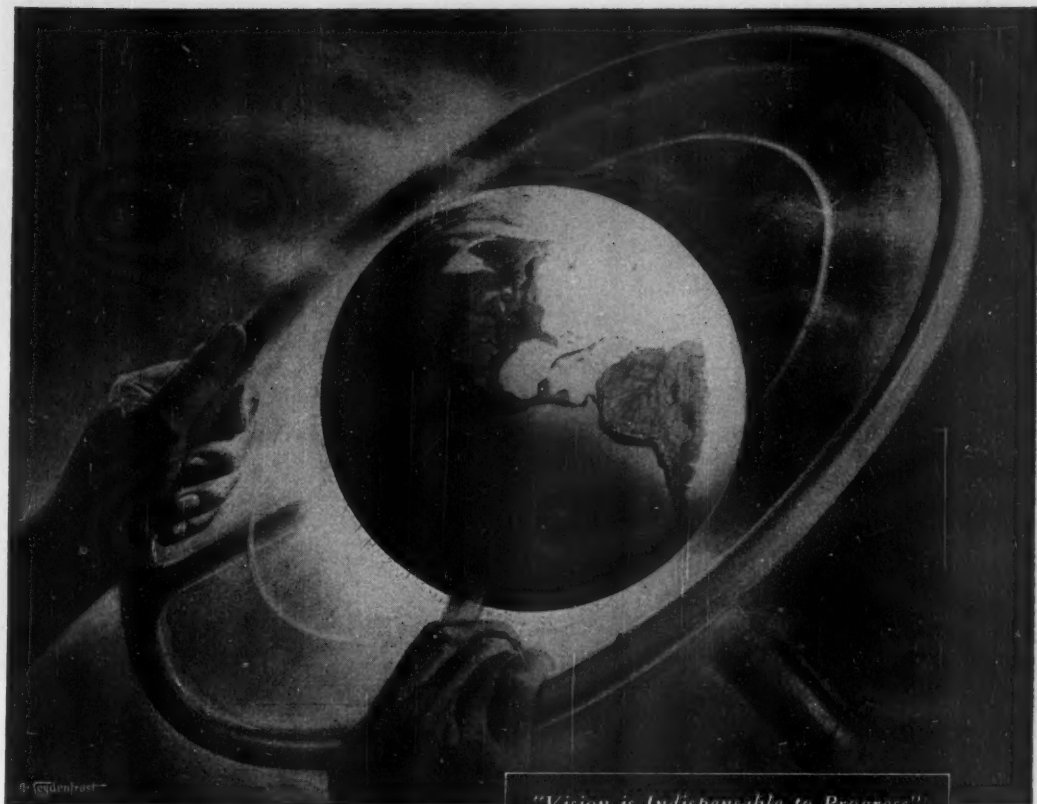
Trucks and trailers today are built for better performance . . . bigger payloads and profits! The men who buy them—and the men who build them—want to know they will stand up. Every hour a truck spends in the shop means valuable ton-miles lost. ☆ That's why the extra skill invested in Bower Spher-O-Honed bearings pays truck owners—and manufacturers, too—such handsome dividends. Basic advances in design and engineering, plus sound construction, have greatly reduced maintenance and made failure a rarity. ☆ For truly modern motor trucks and trailers—and every type of bearing-equipped vehicle and machine—be sure to specify Bower Spher-O-Honed bearings!

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The amazing story of an industry that put a world on wheels

At the turn of the century, it took an entire year to produce 350 automobiles. There were some 4,000 cars on the road.

By 1950, U.S. automobile production averaged 550,000 cars a month—more than double that of the rest of the world. The 40-million passenger cars being operated today could carry every man, woman and child in the United States *at one time!*

The vast automotive industry has, in turn, created a huge crop of small businesses—over 100,000

dealers and garages, nearly 250,000 filling stations.

Automobile manufacturers in 1950 employed 839,000 people, had sales of \$12,520,000,000 and paid \$1,670,000,000 in corporate income taxes. Few industries have had such a profound effect on the life of a nation.

The tremendous investment in factory, laboratory and field test-

ing facilities, and the ideas and ability of the men behind them, have made the automotive industry a symbol of the productive power of American industry.

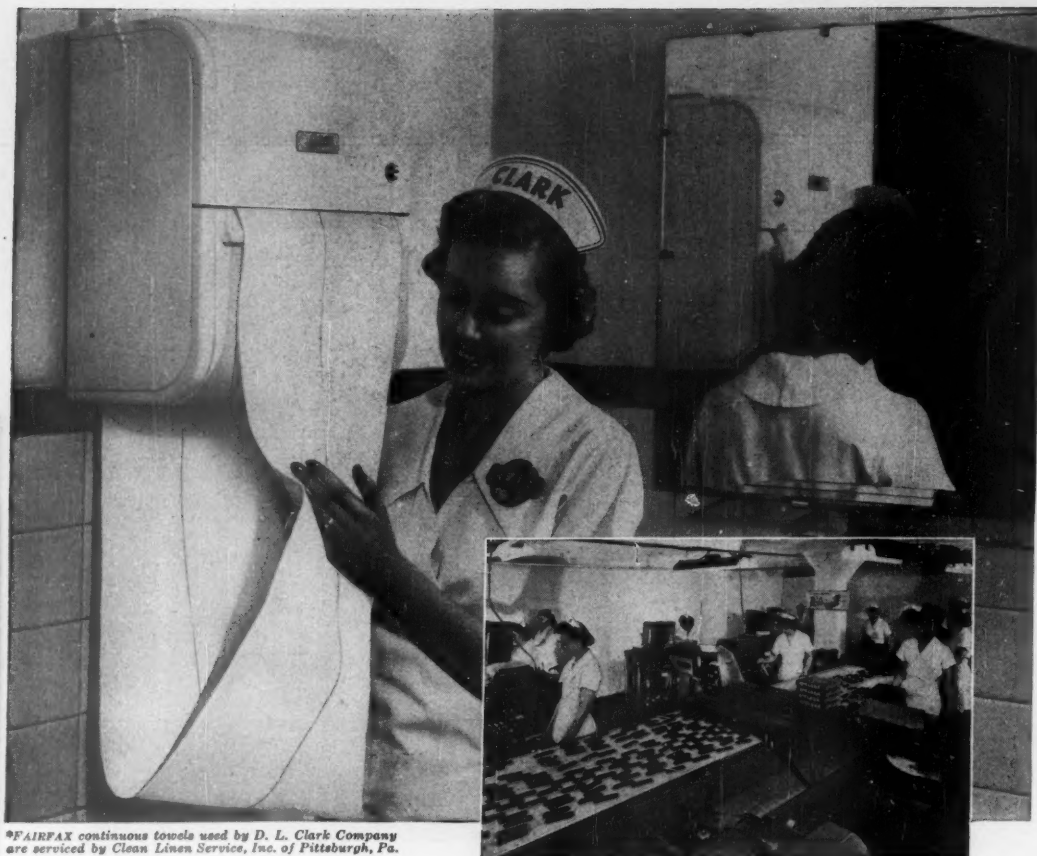
One of our country's greatest assets never appears on the U.S. Treasury's balance sheet—industrious men working together under a free business system.

BANKERS TRUST COMPANY

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*FAIRFAX continuous towels used by D. L. Clark Company are serviced by Clean Linen Service, Inc. of Pittsburgh, Pa.

Clark Candy Company uses Cotton Towels* to boost sanitation and efficiency



**Here's How
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You buy nothing... your linen supply dealer supplies everything. The low cost includes cabinets, pick-up and delivery, provides automatic supply of freshly laundered towels. Quantities can be increased or decreased on short notice. Local service is listed in your classified book under **SERVILINEN** or **LINEN SUPPLY**.

• D. L. Clark Company, Pittsburgh, Pa., maker of the famous Clark Bar, has extremely high standards for plant sanitation and cleanliness. More than 800 spick-and-span employees process, pack and ship 2,000,000 Clark Bars each day. Like most progressive companies, Clark management feels that soft, absorbent cotton towels promote cleanliness. What's more, they're a safeguard against fires.

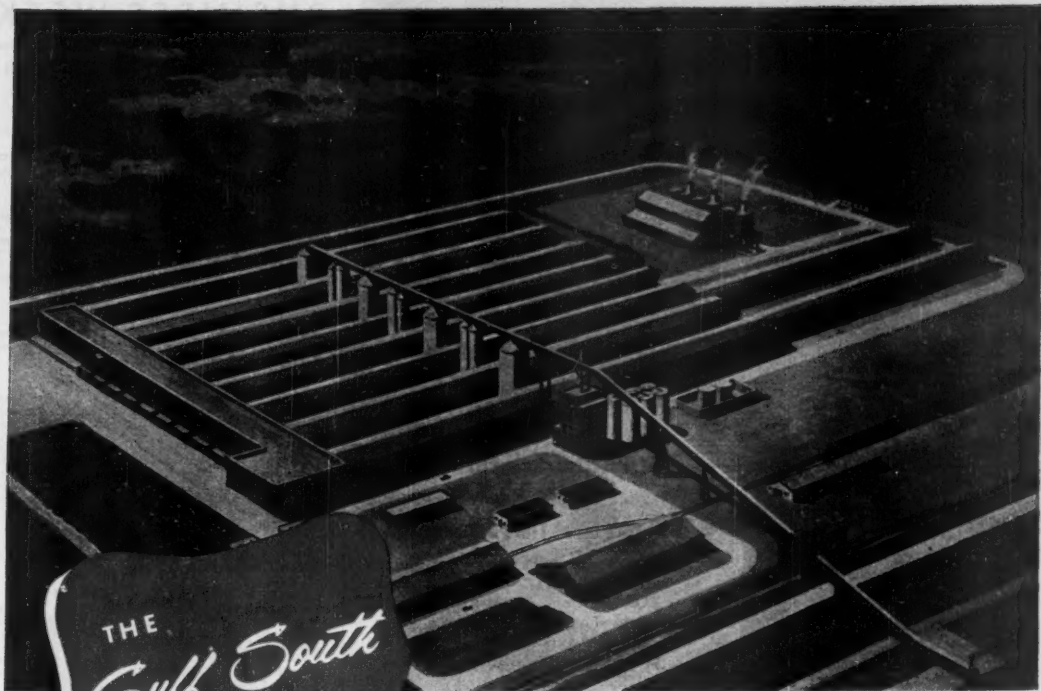
Whatever your towel problem... whether you operate a factory, institution, office or store... you can be sure that soft, gentle, absorbent cotton towels will do the best job in promoting employee morale, building customer good will, increasing tidiness in your washrooms and cleanliness among your employees. Cotton towel service is economical, it's efficient and it's a sign of good management.

Clean Cotton Towels...

Sure Sign of Good Management

Fairfax Towels

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Architect's rendering of huge aluminum reduction plant now being constructed near New Orleans by Kaiser Aluminum & Chemical Corporation — another industry served from the United Gas system.

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The development of new industry in the area served by United Gas has paced the nation since World War II, and is helping to build lasting security against aggressors. Contracts have been let for nearly a billion dollars of private industrial construction in the Gulf South during the past five years.

One important reason for the movement of industry to the Gulf South is the ready availability of natural gas from the pipe lines of United Gas—

adequate supplies of the world's finest fuel at reasonable rates. Others include an abundance of industrial water and electric power, a backlog of skilled workers and a mild, year-round working climate.

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Gulf South

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The Tier-Master's telescoping uprights actually lift 117" from FLOOR-to-FORKS from an overall collapsed height of only 72".

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Left, operator using Tier-Master, moving 3rd-high pallet of sugar and above, with mast lowered entering truck with the same Mobilift and same load.

MODEL "E" TIER-MASTER: 2,000 lb. cap. with 72" Mast (Free Lift: 47"; Mast Ht. extended: 142") outside turning radius: 57".

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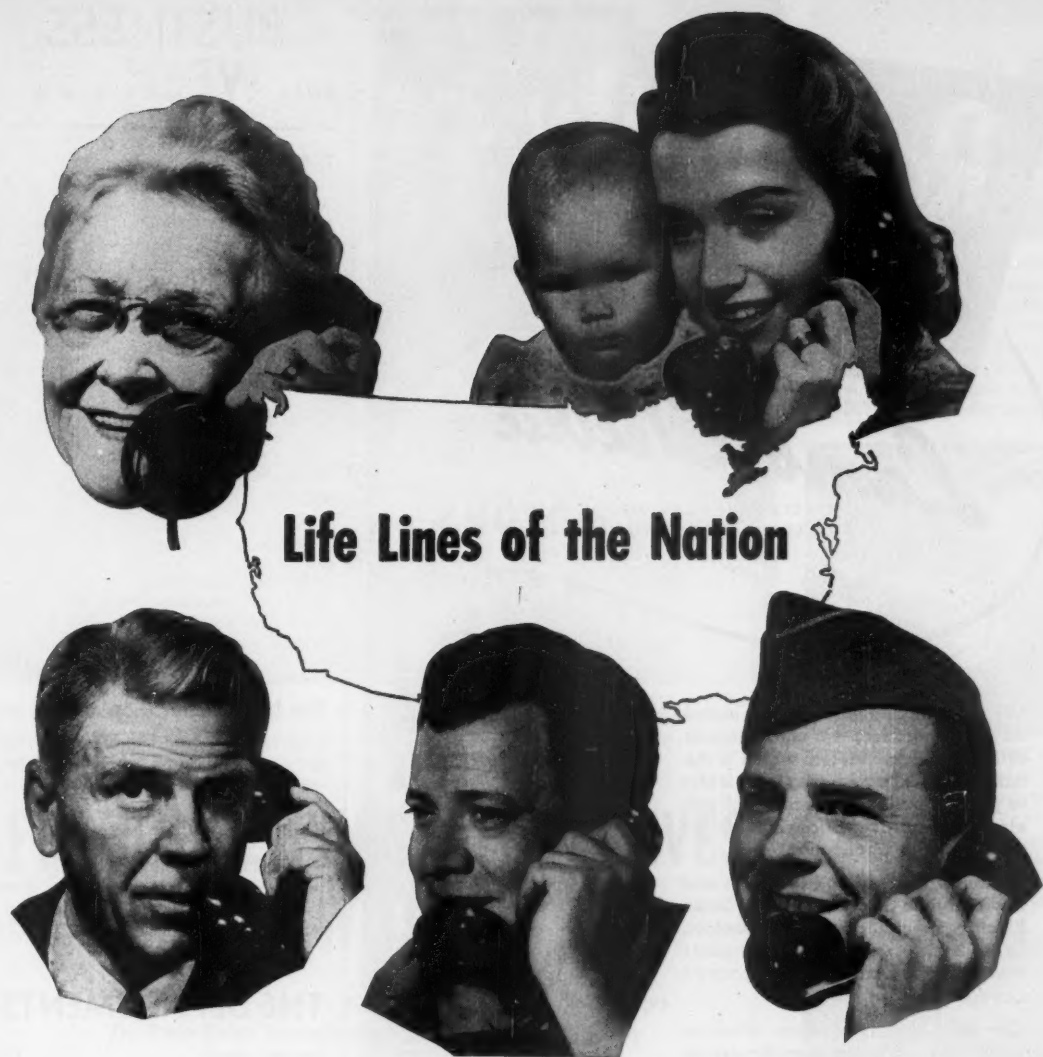
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BUSINESS WEEK • July 21, 1951



Life Lines of the Nation

Telephone lines are the life lines of the Nation. Day and night they unite millions of people. They are a vital, increasing part of national defense.

Because telephone service is so essential, we'd like to talk to you very frankly about two things that make it possible. They are reasonable rates and earnings.

Without reasonable rates, there is no way to continue the good service

you know today. Without reasonable earnings, there is no way to make it better.

Despite the billions of dollars the Bell System has spent in the last six years, telephone facilities are still heavily loaded and a tremendous amount of new construction is needed. On top of the increasing demands from the public are the vital needs of defense.

The money for new telephone facilities must come, in the future as it has in the past, largely from investors . . . from hundreds of thousands of men and women who are willing to invest their savings in the business.

Only through reasonable earnings can the telephone company attract the new money that is necessary to do the job.

BELL TELEPHONE SYSTEM



Reliability..

an end result of
special engineering in

Lamb Electric

SPECIAL APPLICATION
FRACTIONAL HORSEPOWER **MOTORS**

Long life, and dependable day-in and day-out operation, is a characteristic of Lamb Electric Motors which is the main result of engineering each motor to provide the exact mechanical and electrical characteristics required for the particular application.

Thorough dependability is but one advantage to be achieved with Lamb Electric special application motors. Other benefits are—reduced product weight, compactness, improved appearance and lower cost.

Our 36 years' experience, covering practically all types of motor-driven products, is available to help you obtain these results.

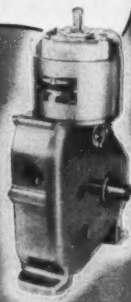
THE LAMB ELECTRIC COMPANY
KENT, OHIO

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Lamb Electric

SPECIAL APPLICATION
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Gear unit for
reversing service
with constant
speed capacitor
for type motor



A motor combining sensitive
performance with minimum size
and light weight for signal
apparatus, range finding and
other electronic uses.



Universal motor parts for
domestic vacuum cleaners and
other high-speed applications.

In BUSINESS this WEEK...

Is Bigness Badness?

• Nine out of ten say no. But they have some reservations. P. 50

And Show Up Sober Monday

• Some day there will be a factory where the machines load themselves, do their own thinking, handle their own production problems. P. 56

One Thing Leads...

... to another, of course, especially in appliances. Start making one, and you find you can't stop. P. 94

Toothless Wolves of Wall Street

• Nobody, apparently, is more confused and uncertain about the future than the stock market, which theoretically sees all, knows all, discounts all. P. 102

The New Dollar Gap

• At best it means more austerity for Britain. At worst, it could knock her out as an effective ally. P. 121

Right Under Our Noses

• A damaging amount of strategic materials and products is slipping from West Germany into Russia's territory. Some of it is even legal. P. 124

THE DEPARTMENTS

Business Abroad	121
Business Outlook	9
Defense Business	110
Figures of the Week	15
Finance	102
International Outlook	119
Labor	32
Management	48
Marketing	94
The Markets	108
New Products	67
Production	56
Readers Report	84
Regional Report	72
Resources	40
Transportation	88
The Trend	128
Washington Outlook	17



ONE COAT OF HIGH-BUILD DULUX does the work of two coats of ordinary finish, leading furniture manufacturers report. And when only one spray operation is necessary, there's a 50% reduction in application time . . . and up to 30% reduction in finish-coat costs.

FURNITURE FINISH THAT GIVES SERVICE WITH A STYLE

DUCO DULUX Furniture Finishes—typical of the 12,000 Du Pont-finish formulas working for industry today

Du Pont DUCO and DULUX Furniture Finishes have helped sell millions of pieces of furniture at all price levels during the last ten years. Women know they can count on a Du Pont finish to resist marring, scratching, discoloration and printing . . . to keep its rich, satiny sheen for years and years.

That's why alert retailers everywhere now point to the Du Pont finish to establish quality fast in a woman's mind. And furniture manufacturers know that a DUCO or DULUX finish will give a woman *lasting* satisfaction.

DUCO and DULUX Furniture Finishes are examples of over 12,000 Du Pont finishes that have been formulated for industry during the last twenty-five years. Among them may be a finish that can help you bring down your manufacturing or maintenance costs . . . enhance the durability, appearance and sales appeal of your product. Whatever your finishing problem, contact the Du Pont sales technician in your area . . . or write E. I. du Pont de Nemours & Co. (Inc.), Finishes Division, Wilmington 98, Delaware.

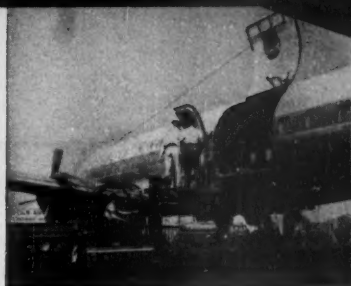


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AND SPECIAL-PURPOSE FINISHES FOR INDUSTRY**

DUCO and DULUX are Reg. U.S. Pat. Off



KEEPING AIR FREIGHT COOL! The white DULUX finish on the fuselage of this huge new DC-6A commercial cargo plane, in addition to being decorative and distinctive, is designed to reflect sunlight, and thereby keep cabin temperatures down for the protection of air freight. Trim and insignia were also done with DULUX in red, white and blue.



SAND TRACKS MEASURE DRYING TIME! From small metal cones, sand drops on these slowly revolving test panels, leaving spiral-shaped tracks on the wet finish. After a set time, the Du Pont chemist stops each panel to determine point at which sand no longer adheres to test finish . . . thus he can measure exactly the drying time of any formulation.



SHOWROOM FINISH THAT CLINCHES SALES! Twenty-five years ago, a new Du Pont finish, DUCO, helped the automobile industry lick a bottleneck: it cut drying time from days to hours. Now vastly improved, DUCO is still the auto-industry favorite—for streamlined production and for showroom sales appeal.



How to Handle Perishables? The Dairy People Agree 100%

THE handling and processing of milk and milk products is one of the nation's major industries—and a mighty delicate, painstaking business, too! But, if dairymen have never-ending problems of protecting flavor and purity, and of keeping maintenance and cleaning costs down, they also have a never-failing helper. It's Allegheny Metal.

For many years now, practically every item of equipment that has gone into a milk-processing plant has been made of stainless steel. From the receiving tanks to the bottle or package, and from one end of the country to the other, milk products today seldom come in contact with anything but stainless. As good businessmen, dairymen have found that nothing else can do the job as well. No other commercial metal is at once as strong, as corrosion resistant, as easy to clean and keep clean, and as lifetime-lasting in service.

The dairy and food industries, of course, class as essential uses for Allegheny Metal. There are many others: in the processing of chemicals,

drugs and petroleum products, for example—and in planes, ships and many other vital items of defense equipment. Naturally, some less essential uses have to give way, but there are ways to spread the supply of stainless steel farther.

For one, we're continuing our many-million-dollar program of expanding production. For others, we offer every assistance to fabricators to make more efficient use of stainless steel, and to find alternate grades which will use less of the critical alloying materials. *Let us work with you!*

* * * * *

Complete technical and fabricating data—engineering help, too—are yours for the asking from Allegheny Ludlum, the nation's leading producer of stainless steel in all forms. Branch Offices are located in principal cities, coast to coast, and Warehouse Stocks of Allegheny Stainless Steel are carried by all Joseph T. Ryerson & Son, Inc. plants. • Address Allegheny Ludlum Steel Corporation, Oliver Building, Pittsburgh 22, Penna.

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You can make it **BETTER** with
Allegheny Metal



BUSINESS OUTLOOK

BUSINESS WEEK

JULY 21, 1951



Keep an eye on prices. They aren't likely to go up any time soon, but even a leveling off would be very significant.

Right now we are in an inventory-liquidation stage where price weakness feeds on itself. That's true in almost everything but the metals.

This sort of swing always goes too far; watch for the turnaround.

There's too much tendency to blame price weakness on truce talks. Actually, this decline began long before the peace feelers (page 108).

Peace psychology can't be ruled out of things, of course. But there are solid business reasons along with the psychological.

Prices of sensitive raw materials have been sliding since last February. The break now exceeds 16%. The more sluggish wholesale index turned down later and, so far, has lost little more than 2%.

The decline has quickened lately because of the redoubled effort to lighten stocks of consumer goods. Truce talks are, in part, coincidental.

Many aspects of the price-and-inventory situation today closely resemble the picture in early 1949. However, there are some major exceptions.

On the strong side: This time, there's a backstop of rising arms output. Also, there's the boom in capital goods and industrial construction. These bolster sentiment, promise to turn the tide.

On the weak side: We don't have 1949's mounting output of autos and homes. But neither of these is exactly in a tailspin.

On balance: No more than a small dip in manufacturing is likely.

There's little evidence, so far, of the seasonal rise in bank loans.

That's logical when inventories are being liquidated. Manufacturers of consumer goods not only are not placing orders for raw materials; they are eating into supplies on hand.

And, until they move finished goods, they won't be buying.

Under the circumstances, most businessmen are paying off the banks. This offsets the growing need for funds in heavy goods lines.

July is proving the worst month so far for soft goods producers and distributors. Vacation shutdowns weren't enough to ease the oversupply.

Price cuts, plant closings alternate weeks, shorter hours, and a variety of other medicines are being tried.

Textiles and shoes are pretty typical of the consumer lines that are in rough water.

Both industries sailed full-tilt throughout the first half of this year. In cottons, particularly, mill customers had placed orders months ahead. But now the glut is backing up clear to the spinners of yarn.

King Cotton is being harassed from all sides. The drop in demand coincides with forecasts of a huge crop. That smacked prices.

But up until July, last month of the cotton year, domestic use of the fiber had been nothing short of spectacular. Mills used 9.9-million bales in the 11 months—almost as much as was grown last year.

Wool, unlike cotton, isn't faced with the prospects of a big increase in

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JULY 21, 1951

supply. (In fact, the worldwide shortage is due to persist until synthetics fill the gap.) But the demand picture has changed, particularly in the U. S. And the drop in orders here has cut wool's price almost in half.

Retail sales aren't faltering so much as you might think in view of the general distress in textile and apparel trades.

Dollar volume of department stores in most of the country last week was about even with a year ago. That leaves something to be desired in unit volume, but it isn't bad when you consider that last year's was swelled by the scare-buying boom.

Demand for metals is as high as ever—but producers have qualms.

What bothers them is this: They saw the once-invisible inventories of soft goods come to light and then turn into distress merchandise. They wonder if that could happen to metals, too.

Some observers believe a lot more metal has been squirreled away than users will admit. Any bad jolt, they argue, would dump it on the market.

Distribution agreements for sulfur, tungsten, and molybdenum among the principal Atlantic Pact users should ease world markets.

But there's a suspicion that they won't improve U. S. supplies, particularly in sulfur and molybdenum. As one trade observer puts it: "It's easy to make these deals as long as we do all the giving."

As the dominant producer of both materials, we gave.

In tungsten, it's a little different. We are mainly reliant on imports. And the agreed price should encourage higher output.

Here's something that could bring down the cost of many things we import: A cease-fire would certainly cut shipping costs. In fact, truce talks alone have been enough to weaken rates on bulk cargoes.

Meanwhile, smaller U. S. shiplines may be in for trouble. They claim they can't meet the wage rise granted recently by the big fellows.

We may see steel output up at about 108% or 110% of rated capacity one of these days. Either that, or the rated capacity will have to be revised upward to allow for new facilities that have been brought in.

At the start of 1951, capacity was put at 104-million tons annually.

But the defense authorities base third-quarter allocations on 27½-million tons—equal to a 110-million-ton annual output.

Normally, the American Iron & Steel Institute revises the capacity figure only at the turn of the year. Recently, however, facilities have been added so rapidly that interim reports have been necessary.

There are two good ways to keep the country's income rising—boost the amount of money everyone takes in or just revise the figures upward.

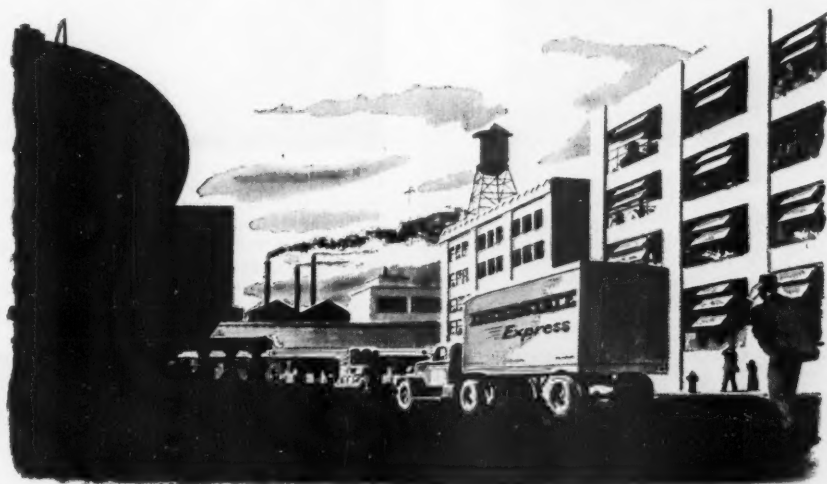
This year, we have the advantage of both.

Personal income has been rising at the rate of about \$10-billion a year so far in 1951. And now the Dept. of Commerce comes along with revised estimates that up the level by \$5-billion more.

At \$249.5-billion annually, we are \$30-billion ahead of a year ago.



The wind no longer blows up costs —thanks to Gulf Sani-Soil-Set



ONE OF THE MANY WAYS INDUSTRY PROFITS THROUGH THE USE OF GULF OILS AND GREASES

Some years ago the summer winds literally blew up costs in a New England manufacturing plant. Dust from plant grounds caused excessive wear in precision machines, upped cleaning expense, and contaminated employees' food in the cafeteria.

That was before Gulf Sani-Soil-Set took over the job of dust control. After just one application of this outstanding compound—no dust annoy-

ance for the entire summer season! A clean, fresh surface on plant grounds and parking areas. And, no "tracking" into halls and offices.

Gulf Sani-Soil-Set may be the answer to *your* problem of controlling dust outside the plant. Send today for your copy of the booklet "Gulf Sani-Soil-Set—the modern agent for controlling dust."

Gulf Oil Corporation • Gulf Refining Company
GULF BUILDING, PITTSBURGH, PA.



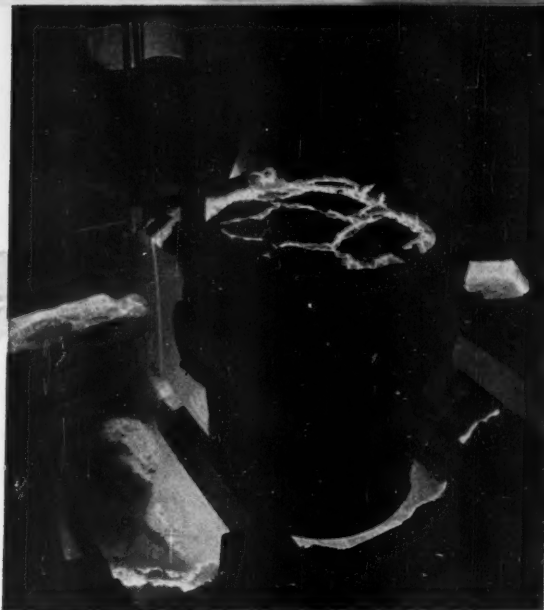
Gulf Oil Corporation • Gulf Refining Company
Room 719, Gulf Building, Pittsburgh, Pa.

Please send me, without obligation, a copy of the booklet "Gulf Sani-Soil-Set."

Name.....
Company.....
Title.....
Address.....



A stiff leg crane, manufactured by Clyde Iron Works, Inc., Duluth, Minnesota, a Barium subsidiary, producers of many types of modern material handling equipment, such as Whirley cranes, hoists, winches, derricks, pile drivers, road rollers, etc. Floating cranes, material handling equipment and barges are also produced at Barium's subsidiary, Wiley Manufacturing Company, Port Deposit, Maryland.



One of a battery of six open hearth furnaces producing carbon steel at Barium's Central Iron and Steel Company, Harrisburg, Pennsylvania, producers of steel plate, stampings and fabrications. Phoenix Iron and Steel Company, also operating six open hearth furnaces, produces structural steel and shapes and through their subsidiary, Phoenix Bridge Company, fabricates bridges, buildings, and other similar structures.



This large, modern press at Barium's Geometric Stamping Company, Cleveland, Ohio, stamps out medium and heavy metal parts. Frequently, they are then weld-assembled into complete and semi-finished products. To cut parts costs without cutting quality, investigate stamping. Write Barium.



Spring ends are "squared off" on this tremendous grinding machine at Cuyahoga Spring Company, Cleveland, Ohio, a subsidiary of Barium. Coiled wire springs and wire specialties are made to order, including moulding clips... stamped clips that do not require any bolts, screws or nuts.

**LINKED TOGETHER
TO SERVE INDUSTRY
WITH A**

Continuous Chain of Steel and Steel Products

One source supplies industry with steel in many forms . . . plate, structurals, fabrications, forgings, stampings, springs, bolts and nuts.

One source controls quality from blast furnace to finished product . . . ready to work as a self-contained unit to speed urgently needed orders.

That source is Barium Steel Corporation . . . a team of strategically-located companies working closely together, bringing joint knowledge to bear to solve your steel problems.

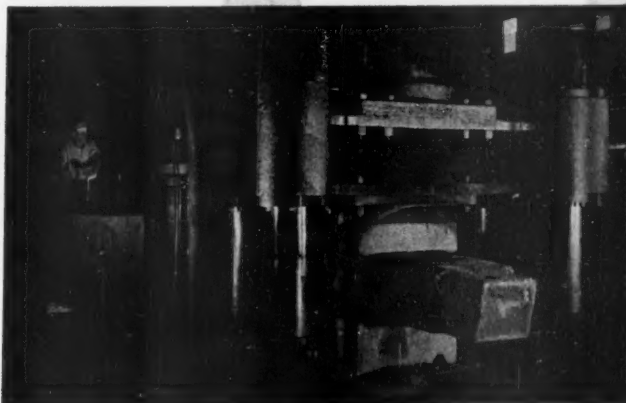
Just a glance at the picture-captions partly reveals Barium's diversity. The scope is even broader, as you'll find out, at no obligation, by describing your problem or need. Simply address Barium at 25 Broad St., New York City.

Barium
*A coordinated effort of
15 companies working in steel*
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Precision threads on special alloy steel bolts are ground on this automatic machine at Barium's Erie Bolt and Nut Company, Erie, Pennsylvania. Here every threaded fastening device . . . even commercial bolts and studs . . . must pass the toughest inspection test.



Flat die forgings, both pressed and hammered, are produced from ingots like this, which are melted in open hearth furnaces at Industrial Forge & Steel, Inc., Canton, Ohio. This subsidiary of Barium is a leading specialist in heavy forgings, both carbon and alloy.



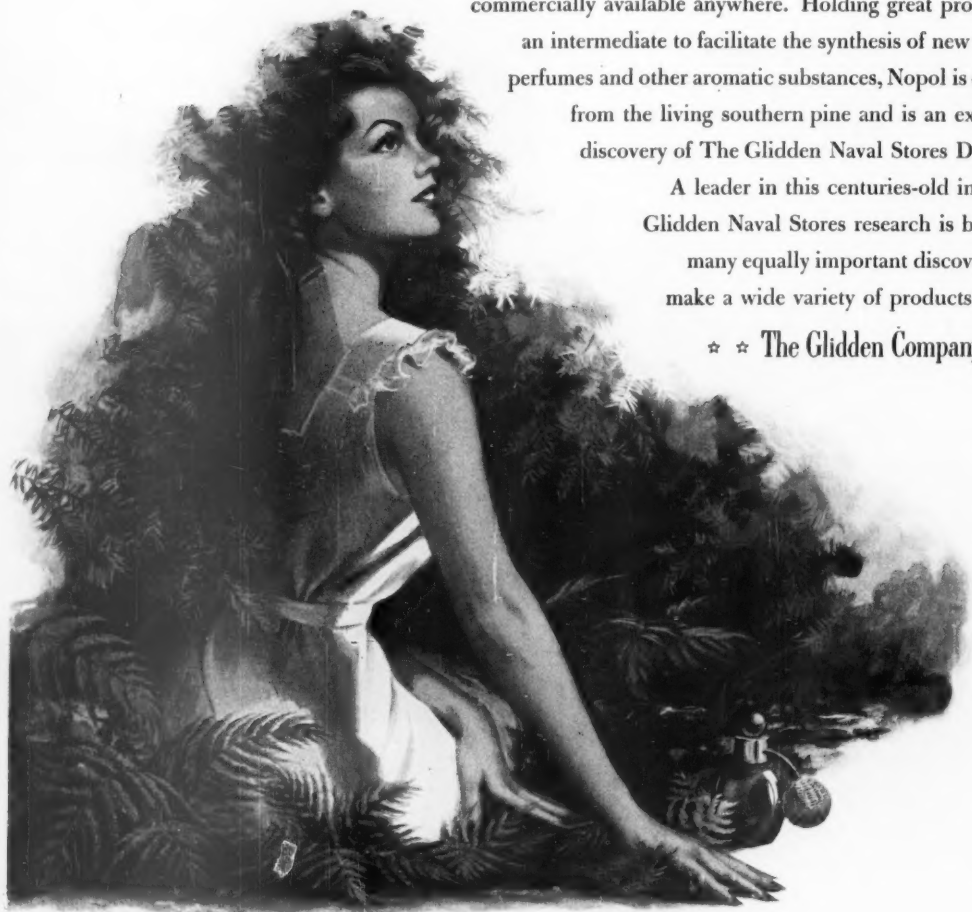
Bolt heads are being formed on this gigantic upsetting machine at Bayonne Bolt Corporation, a subsidiary of Barium. Nuts, rivets, and other related steel products are also made by this subsidiary.

From a pine forest we took a Secret for Charm

...Through the constant search for new secrets from the pine tree now comes Glidden *Nopol*—the only bicyclic primary alcohol commercially available anywhere. Holding great promise as an intermediate to facilitate the synthesis of new flavors, perfumes and other aromatic substances, *Nopol* is derived from the living southern pine and is an exclusive discovery of The Glidden Naval Stores Division.

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In laboratories, from coast to coast, Glidden PLANNED RESEARCH is helping industry to reduce costs and increase manufacturing efficiency with present products—and to discover new ones. DECENTRALIZED—for close contact with customers—yet INTERLOCKED for interchange of ideas and testing—Glidden Planned

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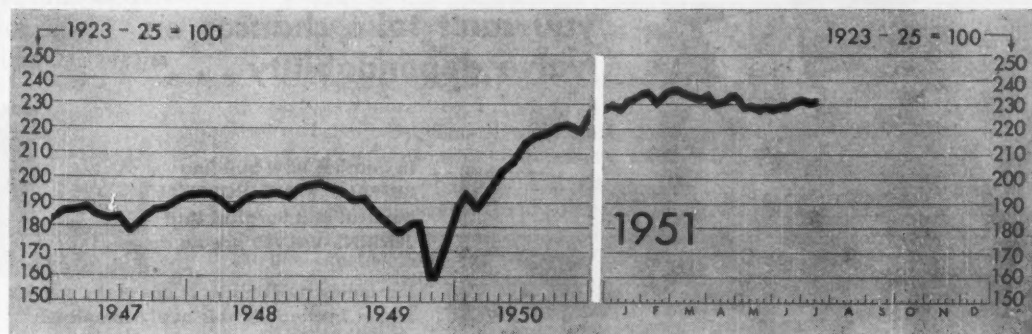
The Glidden Company, Cleveland 14, Ohio. In Canada, The Glidden Company, Limited, Toronto.



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through Planned Research*

Principal Glidden Products: **DURKEE FAMOUS FOODS:** Durkee's Famous Dressing, Margarine, Mayonnaise, Salad Dressing, Shortening, Salad and Cooking Oils, Shred Coconut, Spices and Extracts, Worcestershire Sauce; Puff Pastry Margarine and Shortenings for the Bakery Trade; Special Ingredients for Confectioners **PAINTS:** Spred SATIN; Spred-Flat; Spred-Luster; Japalac* and Ripolin* Enamels; Speed-Wall*; Pli-Namel; Spray-Day-Lite; Endurance* and Endurance* Imperial House Paints; Gliddenspar Varnish; Nubelite; Industrial Finishes; Graphic Arts and Sign Finishes; Glidair Aviation Finishes • **SOYBEAN PRODUCTS:** Alpha* Protein; Prosein*; Fine Chemicals; Cortical and Sex Hormones; Lecithin; Soya Flour and Grits; Albusoy*; Soybean Meal and Flakes; Edible Emulsifiers • **FEEDS:** Poultry and Live Stock Feeds and Concentrates • **VEGETABLE OILS:** Soybean, Coconut, Cottonseed, Peanut, Corn, Palm and Linseed Oils • **CHEMICALS AND PIGMENTS:** Zopaque* Titanium Dioxide; Sunolith* Lithopone; Cadmolith* Cadmium Colors; Euston* White Lead; Cuprous and Cupric Oxides; Zinc Sulphate Crystals • **METALS AND MINERALS:** Cubond* Brazing Compounds; Powdered Iron, Copper, Lead and Tin; Barytes; Ilmenite **NAVAL STORES:** Pine Tars and Rosin; Turpentine; Solvents; Rubber Compounding Agents; Resins; Resinates; Terpene Chemicals; Rosin Oils; Guai-a-phene and Glidcol Anti-Skinning Agents.

FIGURES OF THE WEEK



Business Week Index (above) *232.7 †232.6 230.6 215.8 173.1

PRODUCTION

Steel ingot production (thousands of tons).....	2,037	2,029	2,063	1,895	1,281
Production of automobiles and trucks.....	117,838	†98,087	157,026	194,073	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$62,760	\$56,080	\$45,172	\$55,011	\$17,083
Electric power output (millions of kilowatt-hours).....	6,739	6,077	6,747	6,006	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,171	6,169	6,189	5,495	4,751
Bituminous coal production (daily average, thousands of tons).....	1,410	†1,912	1,648	319	1,745

TRADE

Miscellaneous and L.C.I. carloadings (daily av., thousands of cars).....	78	78	78	76	82
All other carloadings (daily av., thousands of cars).....	59	59	58	56	53
Department store sales (change from same week of preceding year).....	+1%	-2%	+3%	+8%	+30%
Business failures (Dun and Bradstreet, number).....	173	129	130	187	217

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	475.0	481.8	493.3	433.5	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100).....	316.3	322.9	337.9	256.8	198.8
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100).....	363.0	365.6	375.7	350.4	274.7
Finished steel composite (Iron Age, lb.).....	4.131¢	4.131¢	4.131¢	3.837¢	2.686¢
Scrap steel composite (Iron Age, ton).....	\$43.00	\$43.00	\$43.00	\$37.17	\$20.27
Copper (electrolytic, Connecticut Valley; lb.).....	24.500¢	24.500¢	24.500¢	22.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.32	\$2.27	\$2.36	\$2.19	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	39.55¢	43.45¢	45.25¢	37.52¢	30.56¢
Wool tops (Boston, lb.).....	#	#	#	\$2.38	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's).....	173.6	172.0	174.5	134.4	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.53%	3.55%	3.49%	3.34%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	24-2½%	24-2½%	24-2½%	14-1½%	3-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	49,667	†49,340	51,133	47,547	†45,210
Total loans and investments, reporting member banks.....	70,099	†70,268	69,492	67,586	†71,147
Commercial and agricultural loans, reporting member banks.....	19,120	19,153	19,085	13,725	†19,221
U. S. gov't guaranteed obligations held, reporting member banks.....	30,697	†30,886	30,555	36,248	†49,200
Total federal reserve credit outstanding.....	24,267	23,970	23,783	18,757	23,883

MONTHLY FIGURES OF THE WEEK

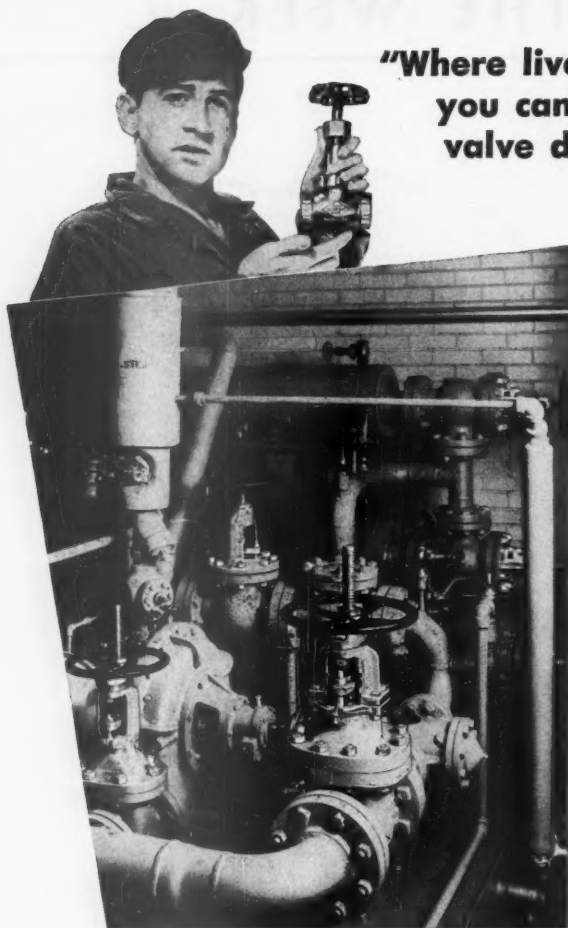
		Latest Month	Preceding Month	Year Ago	1946 Average
Personal income (seasonally adjusted, in billions).....	May.....	\$249.5	\$249.0	\$216.9	\$177.7
Farm income (seasonally adjusted, in billions).....	May.....	\$21.4	\$21.2	\$17.0	\$18.9
Bank debits (in millions).....	June.....	\$135,027	\$130,700	\$119,399	\$87,502
Exports (in millions).....	May.....	\$1,351	\$1,374	\$829	\$811
Imports (in millions).....	May.....	\$1,018	\$1,024	\$659	\$412

*Preliminary, week ended July 14.

††Estimate (BW—Jul. 12 '47, p. 16).

†Revised.

#Insufficient trading to establish a price.
‡Date for 'Latest Week' on each series on request.



**"Where lives are in the balance,
you can't take chances on
valve dependability . . ."**

**In another new building
BUFFALO STATE HOSPITAL'S
Medical and Surgical Unit
JENKINS VALVES are on duty.**

Expanding the facilities of one of the nation's largest institutions, this newly completed 600-bed Medical and Surgical Building has 698 rooms, two large operating rooms, and seven laboratories. In this building, and in a new power house to serve the entire hospital, more than 1975 Jenkins Valves are installed.

The complex modern equipment required for the treatment and comfort of patients in such a building *must* operate with unfaltering efficiency. On their performance record, Jenkins Valves were chosen.

In *any* building, this same efficiency is essential to operating *economy*, present and future. That's why Jenkins Valves have been the choice, consistently, of leading architects, engineers and contractors who plan and construct the modern buildings, for every purpose, that are changing today's skylines.

Jenkins builds *extra* endurance into valves—proved by low upkeep cost records in every type of service. Yet, despite this extra value, you pay no more for Jenkins Valves. For new installations, for all replacements, let the Jenkins Diamond be your guide to lasting valve economy. Jenkins Bros., 100 Park Ave., New York 17. Jenkins Bros., Ltd., Montreal.

Among the 1100 Jenkins Valves in the new Power House at the Buffalo, N. Y., State Hospital are these in the prefabricated pump heater set. More than 875 others control steam, water, fire, air conditioning and other vital pipelines in the new Medical and Surgical Building.

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LOOK FOR THE DIAMOND MARK
VALVES



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GEO. H. DRAKE, INC., BUFFALO, N. Y.

Heating Contractor
QUACKENBUSH CO., INC., BUFFALO, N. Y.



WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JULY 21, 1951



A freeze on new industrial and commercial construction is being considered by the National Production Authority. It may be ordered for the last quarter (page 26).

Shortages of structural steel are the reason. Projects started and ready to start need more steel than is available. So officials figure that the only way to balance up demand with supply is to call a halt on new starts—except for defense projects that can't wait. Even then, some big steel-using projects already under way will be stalled.

A thaw would start around mid-1952. By then, much construction now under way will have been finished, and officials will have a better idea of the new construction needed to round out industrial expansion for defense.

Homebuilding is keeping up a fast pace, despite the restrictions on mortgage credit. But recent figures on starts are misleading.

The June rise was due to public housing. Local housing authorities are afraid of a limitation on the starts they can make this fiscal year. So in June they started 42,300 units, compared with only 3,200 in May.

Private starts are off. They dropped from 97,000 in May to 87,000 in June. But that will still keep building humming until fall.

Control law hysteria is dying down. Truman may raise a fuss about the kind of powers he's getting. But his lieutenants are convinced he can't force Congress to do a complete about-face. So now they are retreating from charges of an "unworkable" law and predictions of economic doom. Officials aren't so worried as public statements indicate (page 21).

Mobilization boss Wilson is backing off his limb. Until recently he was predicting that the defense program would hit the rocks unless Truman got the kind of law he wanted. But now Wilson's aides say he has no intention of quitting Washington. That's the tipoff that the controls now up before Congress can be lived with.

The same is true of economic stabilization director Johnston. His warnings that stabilization would be killed by what Congress is doing now are in a lower key. The tune lately is that we still will have stabilization, but at a higher price level than had been hoped.

Price boss DiSalle is quieting down, too. He threatened to free meat from ceilings if Congress blocked slaughtering quotas and rollbacks. Since that didn't scare Congress into voting everything the DiSalle way, the price boss now says he will keep meat under ceilings—high ceilings.

The Truman-Congress schism is widened by the pulling and hauling on controls. One top Truman administrator sums it up this way:

Congress lacks confidence in the executive branch of the government. New instructions from the public—the 1952 elections—are 16 months away. So Congress, doubting the White House, is taking over the leadership. And since it doesn't trust the administrators, it insists on detailing how laws are to be administered, a job at which Congress is no expert.

Control law changes won't up prices generally, despite Administration

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
JULY 21, 1951

predictions. The only ceilings that will have to go up are those that OPS recognizes were set too low in the January freeze.

The impact on wages will be more significant. The unions are sore about the beef rollback ban and will use this to demand more raises.

Wrangling over a new wage formula is bitter. Union rivalries and politics are muddying the waters.

A boost in the 10%-since-January, 1950, rule to take into account rises in living costs and escalators is the most-talked scheme. But it offers little to unions that got above living cost boosts before controls. For instance, it would freeze the mine workers while other unions catch up.

A substitute is being debated. It would grant increases equal to living cost changes since the last contract. This would be more acceptable to John L. Lewis and might avoid further trouble in coal. But other unions don't like a government policy that keeps Lewis out in front.

Changes in the stabilization command are coming. Truman staffed up under temporary arrangements, and time is beginning to run out.

The Wage Stabilization Board chairmanship is due to change no later than September. Chairman Taylor is scheduled to return to the University of Pennsylvania then.

The economic stabilization director is supposed to go in the fall. Johnston's leave as motion picture czar is up in October. He wants to go back.

The price boss wants to quit in December. DiSalle's political aim is to run for governor of Ohio—if Lausche doesn't want another term—or for Senator on the Democratic ticket against Republican Bricker.

Contract termination policy still is up in the air, despite the fact that a settlement in Korea will bring many changes in defense orders.

The comptroller general wants a hand in contract terminations. This would mean delay before a contractor could consider a termination final.

The military wants exclusive power, as it had during World War II, to make final settlements, what it calls a 3-F policy—firm, fast, final.

The military probably will win out, after time-taking delay.

The issue of strategic vs. tactical air power is coming into the open again. And this time the tactical advocates are better supported than heretofore. The reason is that in Korea the Army got better support from Navy and Marine aircraft than from the Air Force, whose emphasis is on strategic bombing.

Congress may settle the issue. Sentiment to expand the Air Force, from the presently planned 95 groups to around 150, is on the rise.

A manmade earth satellite long has been a matter of speculation. The idea is to send up a rocket that would keep circling the earth, above the atmosphere, and from which atomic weapons could cover any nation on earth. Plans to determine the scheme's feasibility now may be in process. That's a rumored explanation for a big chunk of unspecified funds in the defense bill. It sounds fantastic, of course. But so did atom bombs and guided missiles a few years back.

HAMILTON STANDARD DIVISION

UNITED AIRCRAFT CORPORATION

EAST HARTFORD 8, CONNECTICUT, U.S.A.



April 12, 1951

The International Nickel Company, Inc.
67 Wall Street
New York 5, New York

Attention: Development & Research Division

Gentlemen:

The Hamilton Standard Division of United Aircraft Corporation has found that information and technical services available from The International Nickel Company have helped to solve complex materials problems that arise in producing aircraft propellers and accessories. We often contact your local technical field staff, and in several instances new techniques and information have been developed as a result of cooperative research efforts between our companies.

Aircraft propellers and accessories must operate with absolute reliability; and, naturally, many unusual engineering and manufacturing requirements are imposed upon the materials of construction. Our products must combine maximum strength with minimum weight; they must resist abrasion, corrosion, wear, and severe temperature changes. Oftentimes very special properties are necessary for service or fabricating reasons. Consequently, our staff of research, design and materials specialists are glad to draw upon every available outside source for information.

The INCO technical staff has assisted us in developing propeller blades with improved abrasion and corrosion resistance, and in obtaining valuable information which allowed use of unfamiliar alloy steels to secure special properties for new designs. In other cases, information enabled us to maintain quality and performance of propellers when we were compelled to change materials. Your technical representatives are frequently consulted about manufacturing and processing operations, and often suggest improvements in heat treating cycles and assist in solving machining problems.

Altogether the fund of information and experience available from International Nickel has been of great value to our organization.

Very truly yours,

F. S. Klock, Chief Materials Engr.

**An example
of INCO
Technical
Assistance**

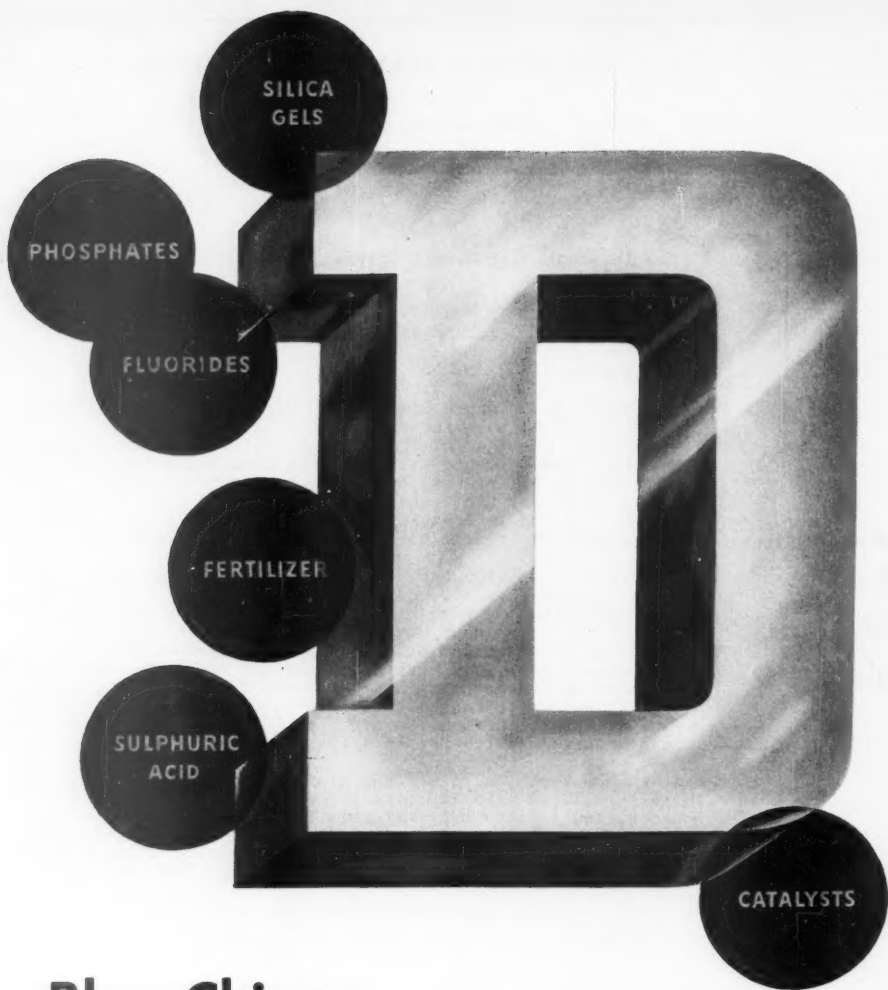


More than ten years ago, INCO launched a vast underground mining project, to assure continuous high output of nickel. This expansion program, when completed, will permit hoisting 13,000,000 tons of ore annually. This tonnage will surpass that attained by any other non-ferrous base metal underground

mining operation in the world.

At the present time the total length of underground development in these mines is more than 283 miles. This is considerably greater than the combined underground mileage of the rapid transit systems of New York and London.

THE INTERNATIONAL NICKEL COMPANY, INC. 67 WALL STREET
NEW YORK 5, N. Y.



Blue Chips...

Materials much needed to keep pace with the rapid changing world of today are produced through the ever growing field of chemistry. Davison is constantly adding to their "blue chips" in this great industry through continuous research and development. That is why leaders in industry and agriculture turn to Davison. They know the Davison "D" means dependability!

PROGRESS **D** THROUGH CHEMISTRY

THE DAVISON CHEMICAL CORPORATION
Baltimore 3, Maryland

PRODUCERS OF: CATALYSTS, INORGANIC ACIDS, SUPERPHOSPHATES, PHOSPHATE ROCK, SILICA GELS, SILICOFLOURIDES AND FERTILIZERS

The Issue	The Law — as of 1950	Truman Wants This	Congress Is Likely To Do This
Price Rollbacks	As far as June '50 levels	No change	Some rollbacks permitted
Subsidies	No provision	On food and imports	Limited subsidies on imports
WSB Authority	Has jurisdiction on non-wage disputes	No change	No change
WSB Composition	Tripartite	No change	No change
Government Plants	No provision	Power to build	Limited power to build
Requisitioning	Permitted where necessary	Faster procedure	No change
Consumer Credit	Under complete FRB regulation	No change	Easier payments on autos, durables
Housing Credit	Controlled on new houses	Control over old houses also	Easier payments for veterans
Commodity Margins	No provision	Authority to set	No change
Residential Rents	State and local option on control	Full World War II authority	Reestablish controls in defense areas
Commercial Rents	No provision	Authority to control	No change
Meat Slaughtering	Authority to set quotas	No change	Eliminate quotas

IT NO LONGER looks as if Congress would slash control powers. Truman won't get many of the extras he asked, but on net . . .

Mobilization Survives First Test

This week Congress underwrote the mobilization—for another round, at least.

The legislators now seem certain to give Truman a controls law that is still fairly strong, even by the Administration's own standards. That removes any possibility of a veto.

Beyond that, Congress may actually

beef up the mobilization program by voting the Pentagon more Air Force money than it asked for.

• **One Doubt Ended**—Congress' attitude this week just about eliminates the last big question mark on the prospects for business after a Korean peace.

When the peace talk first started, it was clear that whether an armistice

would be good business news depended on two things:

- How much would industry's plant expansion plans be cut?
- How far would Congress scale back mobilization?

A week ago (BW-Jul.14'51,p21), BUSINESS WEEK established by a fast survey that industry is not cutting back

its plans at all—it's actually increasing them.

• **Second Doubt**—That left the second question. And for the first few weeks of armistice talk there were clear indications that Congress was in a mood to back away from any hard-hitting mobilization. The Senate drastically curtailed Truman's control powers; talk was the House might go even further; there was talk of chopping military appropriations.

Some members carried this lackadaisical approach to defense far enough to demand that the key price-wage control program be junked entirely. Until this week, it looked as if they might possibly get their way.

• **Doubt Ends**—But reaction began to set in. Time and a little sober reflection have made Congressmen ponder: Peace in Korea doesn't end the nation's danger—and continued rearmament eventually spells inflation.

Besides, the 1952 elections are getting closer all the time.

I. The Battle in the House

The turning point in Congress came in the House on Tuesday, on the crucial issue of price rollbacks.

Last month the Senate had passed a version of the new law that just about killed all rollbacks below current price levels. OPS claimed the effect of this would be to let prices rise another 5% or 6% over-all.

The House began to debate; Republicans and Southern Democrats were all set to write an even looser price control provision. It looked as though they could easily put across an amendment that would rule out cost absorption entirely. On earlier votes on nonprice issues of the law, they had just steamrollered through weakening amendments.

• **Second Thoughts**—But as the vote on rollbacks finally came up, Congressmen obviously began to have second thoughts. They did stand firm against future rollbacks on beef. But they were less eager to go all the way and deprive DiSalle of any method of bringing other prices into line.

So when the votes were in, the Administration won—207 to 123.

• **Compromise**—On the surface, it looks as though the House and Senate are now poles apart. But even at this stage, you can get a pretty good idea of the kind of compromise that's likely to wind up as the law:

• On meat, the existing rollback of growers' and feeders' prices will stay. But the two additional rollbacks scheduled for August and October are dead.

• On manufactured and processed goods, the outcome is not so clear. Best guess is that DiSalle's rollbacks on out-of-line prices will be O.K.'d,

with some new restraints on how far he can go in forcing companies to absorb cost increases.

As a matter of fact, you can't entirely write off the possibility that the Senate may go along with the House provisions. The smashing vote on the rollback issue represented the calculated decision of House members—all of whom must face the voters next year.

At least 50 Republicans from the cities swung over to vote with the Administration.

II. More for Munitions

Congress is changing its mind on the arms program, too.

There had been talk of whittling down the \$60-billion budget the military asked for this year.

Now there's growing sentiment for spending still another \$10-billion to start building the Air Force to around 150 wings—up from present plans for 95. The Air Force isn't going to get all this overnight, of course.

But here's the thing to note: This kind of thinking means there will be no serious watering down or stretching out of Wilson's preparedness schedule.

III. Business Meaning

—The switch-around on mobilization changes the economic outlook.

A stepped-up aircraft program would increase inflation pressures; but at the same time a stronger-than-hoped-for price law will give the government more of a fighting chance to check inflation.

• **Timing**—And beefed-up rearmament would cause an upturn in lagging retail sales earlier than previously expected. Just by sticking with present spending schedules, the government insures substantial increases in consumer spending money late this year and early next—just at the time that diversion of materials will be cutting civilian output deepest. Extra cash for the Air Force would simply compound the problem.

There's a psychological factor, too: Many consumers will take a decision not to let down as a warning that goods will become scarce after all. Retailers can't count on any scare-buying wave like the one that followed the Korean invasion. But goods may well move more briskly.

• **Control**—The price controllers, however, now seem assured of at least the minimum tools they would need to cope with the impact of excess demand. With power to roll out-of-line prices back, they can permit increases in hard-ship cases and still hold the cost-of-living index roughly unchanged. Increases here and there would be nothing like the 5% to 6% that an across-the-board ban on rollbacks would have produced automatically.

Machine Tool Snag

Mobilization's tightest bottleneck seems no freer following OPS' second attempt to liberalize price controls.

The machine tool industry has now been tagged officially as the narrowest bottleneck in the munitions program (BW—Jul.14'51,p27). Chief mobilizer Wilson and his team have been trying to clear the congestion by manipulating price and materials controls. But the results—in the eyes of machine tool builders, at least—seem to be anything but an incentive to increase production.

• **No Price Relief**—Pricing policy is still the biggest snag. First came the General Ceiling Price Regulation, which told tool makers that their highest prices from then on would be those at which they delivered tools between Dec. 19, 1950, and Jan. 25, 1951. The industry howled at this. A lot of the tools delivered in January were ordered well before Korea—at prices far lower than the general level being quoted during the base period.

Amend GCPR, the industry asked, to set a ceiling at the prices of the tools ordered during the base period, not the ones delivered then, and production will benefit.

Office of Price Stabilization did come out shortly with another pricing order—Ceiling Price Regulation 30. This permitted machine tool makers to price above their GCPR ceiling under certain restrictive conditions. The purpose of the order was to allow for increases in materials costs and for the high costs of subcontracting. But it still wasn't what the patient ordered.

• **Third Try**—Last week OPS tried again. And again, apparently, it failed to give tool makers relief they consider effective. To supplement CPR 30, OPS wrote General Overriding Regulation 15. The gist of this order is that machine tool builders should price their line in such a way as to realize 80% of their average rate of return on their investment during the 10-year period 1938 through 1948. Either that, or adjust prices of individual items so as to cover total unit cost plus 51% profit. It's a take-it-or-leave-it order, effective July 16.

• **No Incentive**—Machine tool builders reacted to GOR 15 with not a little impatience. Washington's avowed aim, they said, is to regulate prices so as to encourage expansion of the machine tool industry. Yet OPS comes out with an order that actually discourages expansion of production. Under GOR 15, a tool maker's income is fixed, no matter what his volume of sales. He

might double his output—keeping the same investment—and still not increase his return by a penny. Where's the incentive?

• **Some Headway**—Tool makers will admit, however, that mobilizers are making some headway on other problems. Under the whip of chief mobilizer Charles E. Wilson, problems of pool orders, industry representation, and materials are slowly pulling into the clear.

In a stern directive issued last week, Wilson outlined the over-all problem of the machine tool industry and detailed his solution. He pointed out that by the end of June, 1952, there will be need for \$2.9-billion worth of metalworking tools. But the industry is now producing at an annual rate of only \$675-million worth. Wilson's goal is to get the industry up to an annual rate of \$1-billion by yearend.

A cornerstone of Wilson's solution was a more liberal pricing policy. Three days after his directive came out, OPS issued GOR 15—which the industry considers hardly liberal.

• **More Pool Orders**—Tool makers were encouraged, however, by Wilson's stand on pool orders. This is a system of insurance for tool makers, a government guarantee that they will have a firm customer for their tools—the government—if they can't sell them on their own.

Originally, the plan was to set aside about \$450-million to back these pool orders and to provide advance payments on tools. The fund was later cut to \$100-million, and advance payments were eliminated. Now Wilson has specifically directed Defense Production Administration to increase the kitty for pool orders and to give 30% advance payments when necessary.

• **A Voice in Planning**—Industry representation in mobilization planning is now assured through the newly formed Metalworking Equipment Division of National Production Authority. This division will manage pool orders and will carry plenty of weight in its claims on scarce materials for tool builders. Wilson made it clear that NPA should get the materials that are needed for machine tools ahead of everything else.

He also told NPA to use its Metalworking Equipment Division to speed up issuance of certificates of necessity for fast tax writeoffs on expanded machine tool plant. Tool makers have been complaining about the difficulty of getting these certificates cleared.

• **Manpower Problem**—If the pricing problem ever shakes down, it's likely that the machine tool industry will be in shape for rapid expansion. Then the big question mark will be manpower. Wilson already has talked Selective Service into granting deferments for skilled tool makers and apprentices.



Auctioneer Knocks Down . . .



. . . Remnants of Lustron Dream

It was a sad week in Columbus for Lustron Corp. More than 4,000 lots of finished inventory, raw materials, tools, and other items used in producing the Lustron porcelain-enameled steel dreamhouse went on the auctioneer's block.

The sale of Lustron's unmortgaged assets was ordered by Federal District Court in Chicago to satisfy creditors in a bankruptcy action brought by three of the prefabricated housing concern's former dealers.

But Lustron's ill wind proved a windfall for some 400 bidders—purchasing agents, junk dealers, and housewives—who came from hundreds of miles around. Businessmen hunting for scarce copper, aluminum, or steel scrap had themselves a field day.

It took a 129-page catalog to list all the items for sale—everything from dishwashers to nuts and bolts. There were bargains galore. One bidder got a hot water heater for \$62.50; they wholesale for approximately \$90. A housewife was able to snare a combination dish and clothes washer at a very attractive price.

But ceiling prices didn't apply to anything sold at the auction. Result: Some scarce items commanded premium prices—and some of the bidders got stung.

When things quieted down after the sale, auctioneers added up the score, found they had taken in around \$430,000—far more than enough to satisfy the modest \$5,000 in claims by the three dealers.



FIRE AND FLOOD beset Kansas City, Mo. Firemen struggled through hip-deep water to fight fuel tank and lumber blaze.

How Superflood Wrecked Kansas City



AND CATTLE DRIFTED through streets of Kansas City, Kan., atop a stockyards shanty.

Kansas wheat farmers prayed for rain last winter and early spring. Their prayers were answered. By June the Kansans cried quits, but still the rains came. A whole year's quota had fallen by the end of June.

The soil was saturated. Streams were inflated by abnormal runoff. The Geological Survey noted that June streamflow in Kansas was 17 times normal. That was a danger sign. But there was worse to come. The skies opened again in early July, focusing the deluge on the headwaters of the Kansas, or Kaw, River. Bernard, Kan., was pelted by 7.75 in. of rain in 24 hours ending 7 a.m., July 12.

Well before that, the flood in the Kansas River had reached disaster proportions. Levees were first overtopped by the water, then ruptured. The climax came when the crest reached the Missouri River at the two Kansas Cities. The Missouri was luckily low at the time, but even so it couldn't absorb the Kansas flow.

• **Superflood**—Both in height and in volume, the flood topped the worst imaginings of river experts. On both counts it surpassed the 1903 flood, the worst previously on record. It met the engineers' definition of a hypothetical superflood that would combine the saturated soil conditions of 1903 with the violence of rainstorms in 1909.

The crest at Topeka topped the 1903 mark by $3\frac{1}{2}$ ft. And the Kansas River spewed its water into the Missouri at a rate of 500,000 cu. ft. per sec.,

370,000 sec. ft. more than the imaginary superfood.

• **Finger in the Dike**—This onslaught of water brushed aside the flood control system the Army Engineers and Bureau of Reclamation were building. Only the Kanapolis Reservoir on the Smoky Hill tributary was in full operation. It managed to contain the Smoky Hill within its banks.

Three other completed reservoirs had been built by Reclamation chiefly for irrigation; they played little part in flood control. Three were still under construction. Congress hasn't appropriated funds for the remaining 11 reservoirs recommended by Army Engineers, partly because of local opposition.

The flood visibly weakened local opposition. Army Engineer chiefs stuffed plans in their briefcases and flew to the scene to strike while the iron was hot.

• **The Toll**—Thanks to early warning and quick evacuation, loss of life was relatively low: 36 deaths through July 17. But property losses at least equaled the historic 1927 and 1937 floods on the Ohio and Mississippi Rivers.

Business and industry will pay by far the major share of the tab. Just how high the bill may go won't be known for days. On July 15 Maj. Gen. Lewis A. Pick, chief of Army Engineers, set it at \$500-million. Next day he revised it to \$750-million and admitted he might still be low. The most widely used figure at midweek was \$875-million, and some guesses ranged up to \$1-billion.

Hardly any of the business loss is covered by insurance. Flood policies are rarely written by U.S. insurance companies. In the entire Kansas City area, only one company was known to have flood coverage.

A special problem arises from damage by fires that raged for days in flooded sections of Kansas City, Mo.: How much loss is attributed to fire and how much to flood?

• **Relief**—Federal and state governments pulled out all stops in rushing relief to flood sufferers.

• Congress acted fast to appropriate \$25-million extra for postflood rehabilitation. President Truman signed the bill immediately after his tour of the disaster area.

• Army Engineers and Interior Dept. sent men and equipment to defend and rebuild levees, with millions of dollars in funds to back them up.

• Food & Drug Administration inspectors checked all flooded foodstuffs for deterioration. Public Health Service rounded up most of the country's dozen or so portable water-purifying units and allocated more chlorine for local waterworks. Disease experts were also mobilized, with danger of epidemic expected to increase.

Nongovernment groups, including the Red Cross, also went into action. Contractors and labor unions in most areas pooled their interests in round-the-clock cleanup work at a flat \$1.50 per hour, no overtime premium. Big companies such as GE and International Harvester sent equipment and crews of technicians to the area.

• **Reconstruction**—Longer-range action came swiftly, too:

• Flood victims were exempt from all consumer credit controls.

• Many companies canceled unpaid balances on accounts of flood victims.

• **Reconstruction**—Longer-range action channeled its entire \$35-million fund for individual and business loans into the flood area, offering loans up to ten years at 3% interest. Loans are only to cover cost of restoring preflood conditions. RFC set up a chain of emergency field offices and recruited loan examiners from all over the country.

• Bureau of Public Roads tossed its remaining \$3-million of 1950 flood relief money into rebuilding of highways and bridges. States must match federal funds on a 50-50 basis.



What's In a Name?

When Johann Strauss wrote "Operetta" on the score of *Die Fledermaus* back in 1874, he set off a hot jurisdictional dispute in 1951. A few months ago, the Metropolitan Opera Assn. decided to put *Fledermaus* on a road tour of 50 cities; it assumed its contract with the American Guild of Musical Artists (AGMA) would cover the touring company. But Actors Equity (also AFL) said no: Since *Fledermaus* is an operetta, it must be played by actors, not musicians. A four-week deadlock followed. This week AGMA backed down. The *Fledermaus* you'll see will be played by the Met's original company—but they'll all carry Equity cards.

Aircraft Threat

Strike at Alcoa plant shows signs of putting a crimp in military plane production. Engine output is hardest hit.

A month-old strike at the Aluminum Co. of America's Cleveland forge plant is threatening to make a bite in military airplane production. It's the first such dispute since Korea to give mobilization officials in Washington real worries. Alcoa's Cleveland plant supplies about 75% of all the forgings and castings used in the aircraft industry.

Alcoa and Labor Dept. conciliation officials talked in Washington this week to try to get some new basis for a Cleveland conciliator to bring the company and United Steelworkers negotiators together. The company has offered a 3¢-an-hour increase, starting when strikers go back to work. The union says no. It wants the 3¢ pay hike to be retroactive to last Dec. 18.

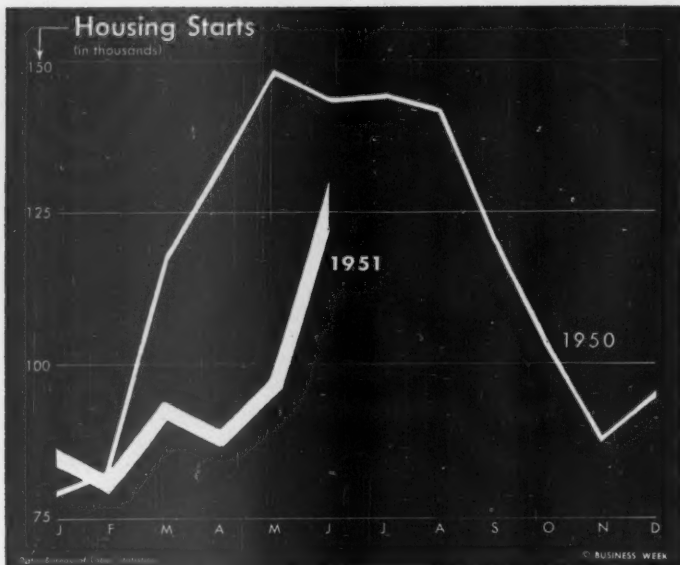
To Alcoa, retroactivity is a matter of principle. It's never made a retroactive labor contract, insists it won't begin now. The union's stubbornness results from its being forced to abandon demands it made on Alcoa originally—for a General Motors-type cost-of-living contract. The Alcoa bargaining was slated to be United Auto Workers' big push to extend such contracts beyond the confines of the auto industry. When the company persisted in rejecting such a contract, UAW went to the 3¢ with retroactivity, insists it will back down no further.

• **Layoffs Threatened**—Aircraft engine makers are threatened with the severest blow if the strike continues. Already Pratt & Whitney has announced that 1,000 of its workers have been cut from 48 hours to 40 hours a week because of a tightening supply of forgings for jet and piston engines. Similar warnings come from Hamilton Standard, makers of propellers, and engine makers such as Allison, Curtiss-Wright, and General Electric.

Westinghouse isn't affected by the strike; it gets its aluminum castings from other suppliers.

Except for Pratt & Whitney's announcement of reduced work week, no actual cutbacks have occurred. The backlog of material on hand when the strike began June 18 was fairly substantial. But the threat will become real if the strike continues much longer.

Defense mobilization chief Charles Wilson is keeping up with developments in the strike, but hasn't made any official move to try to end it yet. The dispute is still in the hands of the Cleveland conciliation office.



SUDDEN JUMP in June starts was a statistical freak. Factory or home, it's still a . . .

Squeeze on Building

It was a long time coming, but now it has happened.

Mobilization has caught up with the building boom.

For months it has been one of the most startling things about the U.S. economy—the way an enormous volume of construction has kept piling up right alongside a growing munitions program.

The cards were stacked against both housebuilding and plant construction—but they kept going.

Credit restrictions were supposed to slash last year's housebuilding boom to ribbons. Way last fall, the government's Regulation X ordered buyers to get off the practically-no-down-payment bobsled they'd been riding. But month after month new houses kept popping all over the landscape. Builders had jammed so many mortgage applications under the wire before Regulation X

went into effect that it was well into 1951 before they got all their pre-restriction schedules under construction.

Material scarcities—everybody figured—would cut deep into the industrial construction plans that companies wrote into their 1951 budgets last fall. The plans were enormous. But clearly they could never be carried out.

All the same, they were. As the first half of 1951 rolled along, every new survey showed that industry was building even more plant than it had thought it would—and was stepping up even further its plans for the future.

This week it is evident that the rush is about over. Across the country, housebuilders' schedules are dropping far behind last year. And in Washington, material controllers warn of deep fourth-quarter cuts in the steel available for industrial building.

1. Steel Limits Plant Expansion

Industry's \$25-billion plant expansion program for 1951 is heading for a substantial jolt. The jolt won't wreck the program, but it will bounce a good part of it into 1952.

The blow is coming soon—as fast as Washington can figure out just how much structural steel can be allotted for plant expansion in the fourth quarter. That will take another week or two, but officials already know they can give industry only a fraction of the steel it

wants for new plant in October-December. And the picture is none too bright for the first quarter of 1952.

• **Stymied**—To the businessman this means: Any new plant that isn't beyond the stage of a hole in the ground right now isn't going very far before next spring. After that, the demand for structural steel is expected to ease substantially.

The controllers have two problems with plant expansion. Long-range, they

are worrying about getting new plant and production when they are needed for defense—such as more ball-bearing output when it's needed for both military and vital civilian uses. For the short haul they're smack up against a shortage of structural steel.

I. Not Enough Metal

You can add it up: Supply of structural steel shapes in the fourth quarter will be about 1,300,000 tons. Defense Production Administration, with accurate figures on only a part of total demands for the quarter, already has requests for nearly 2,400,000 tons—85% more than supply. And DPA figures total demand will come to 200% of supply for the quarter when it has heard from everyone who wants structural steel.

Industrial construction, including such industries as petroleum and the electric utilities, is asking for 495,000 tons—21% of the 2.4-million-ton demand already on file for the quarter. Other big users are hospitals, highways, military construction, and the like.

• **New Problem**—DPA and NPA people, of course, would like to be able to step in with project-by-project allotments for the fourth quarter on the basis of the urgency of each to either defense or essential civilian needs. They also would like to be able to slow poorly timed construction, such as a plant to produce end-items for which there is not yet an adequate supply of components.

This question of timing in defense construction is a new one for CMP. In the last war, plant expansion was well along before CMP came into the picture. Capacity didn't have to be increased much after that.

II. First Move

The CMP staff now finds itself nowhere near being able to judge plant expansion on an urgency basis. The controllers are just now collecting basic data from industry and government on: (1) what is needed first for military and essential civilian production; (2) what each plant being built or expanded will produce; and (3) how much raw materials it will chew up. But this dope won't be available in time to apply it to fourth-quarter allocations. The hope is to have it in time to guide most allocations for the first quarter of 1952.

The October-December allotments must be made soon by DPA—before the middle of next month. All that can be done before then is to cut the mass of requests for fourth-quarter structural steel more or less arbitrarily.

• **Shutdown**—As a stopgap, DPA and NPA have about decided to hold up

virtually all construction starts during the quarter. They're planning exceptions, of course: for construction urgently needed by the military, for a few jobs where concrete or other materials can be substituted for most of the steel. But, by and large, few starts on major construction, public or private, will get either the materials or the license now required by NPA.

The majority of applications will not be thrown out completely. They'll be deferred—probably until the second quarter of next year. Or they'll be told to apply again in the first quarter.

III. Plants Are Culprits

There's a great deal of demand for structural steel for construction other than new industrial plant, of course. But new plant—or rather the timing of it—is largely responsible for the fourth-quarter pinch.

In addition to its over-all bulk, the industrial expansion demand is hard to cut because it includes a good chunk of the new basic production capacity we want—steel, aluminum, chemicals. The plant construction phase for these industries will be largely past by next spring. But because of their sheer size, they'll take an awful bite of structural steel until then.

IV. How It Will Work

Despite the case for new plants, the controllers have no hope of averting the necessity of making arbitrary, across-the-board cuts in steel allotments. Here's how they'll handle the distasteful assignment:

- **DPA will make general allotments** to the military, NPA, and other claimant agencies for specific construction programs, such as military cantonments, steel plant expansion, electric utilities, schools, and hospitals. In no case will any of the agencies get as much steel for the fourth quarter as they have requested. They'll have to spread the DPA allotments over as many projects as possible. But they'll be told by DPA to prevent new starts wherever possible.

- **The controllers expect that even the deferral of new starts won't take up all the slack.** That means there'll be some slowing down, if not actual halting, of some less essential construction. To a degree, the stage of construction will determine the allocation for each job: If it's 50% or more completed, it will probably get all the steel needed.

- **On the other hand, essentiality will become a deciding factor** where a plant, for example, is just started or is at a point where it can be delayed without wasting materials on hand. This will strike hardest at work on plants to turn out consumer goods.



LAKEWOOD PARK was all set, until Regulation X bulldozed the gap in the middle.

2. Housing Shrinks—According to Plan

To the private homebuilding industry, the figures on June housing starts looked too good to be true. The 130,000 starts didn't fall too much below last June's near-record 144,400. In the face of Washington's plan to keep housing starts in 1951 under 850,000 (BW—Apr. 21 '51, p. 24), that looked like money from home.

They were too good to be true. The joker: Only 87,700 were private housing starts; the rest were public housing—rushed through before July 1 for fear Congress would change the public housing laws. Private building showed a decline of 7% from May's 93,800 private starts. And the Bureau of Labor Statistics says that July will show a further drop.

- **Flexibility—Actually, the work is going along just about the way Washington planned.** The government figures that a rate of 40,000 to 50,000 starts a month by November and December will be about right, but officials are keeping a close eye on the situation and are ready with a give-or-take play. They don't want to see housing prospects dry up to the point where builders get so discouraged they begin to disband their organizations. To prevent that, they would be willing even to relax Regulation X—the Federal Reserve Board's rein on mortgage credit.

But willing or not, Congress may force their hand. The Senate has already passed a housing bill that would limit down payment requirements for veterans to a maximum of 6%. That would knock a loophole in Regulation X. The same clause has been added to

a House bill on defense housing that the House Banking Committee will report on as soon as the House finishes voting on its version of the controls bill.

- **Builders Aren't Starving—Builders have been humming the blues ever since Regulation X—"Strangulation X" to the trade—went through last fall.** But, actually, 850,000 starts are hardly peanuts. It doesn't compare with last year's all-time record, of course, but by prewar standards it's a healthy business. And builders are showing plenty of ingenuity in getting around the regulation.

One gigantic housing project, Lakewood Park in Los Angeles County (picture, above), was snubbed up short by Regulation X after 7,400 houses were completed. But the financial backer and one of the codevelopers expect to cover their land and hit the original goal of 17,500 houses through a sponsored cooperative housing plan.

Under the plan, anyone can move into a \$10,000 home for an initial payment of \$695 down and monthly payments beginning at \$57.50. But everyone must plank down his money before a single house can be built. In this case, Regulation X doesn't apply to the individual homeowner, because he simply buys a share in the cooperative. It does apply to the cooperative corporation, which has to put in 17% of replacement cost under Federal Housing Administration rules. But the original developer, now the co-op manager, pools part of his profit on land with the payments to make up the total down

payment that is required by FHA.

• **Fewer Houses, Higher Costs**—In spite of such dodges, the trade hasn't lost faith in the biting power of Regulation X molar. This week **BUSINESS WEEK** reporters across the country asked builders how they were doing. Almost without exception, their outlook was glum: Starts were 27% to 75% below 1950.

In general, one-family homebuilding declined more than multiple dwellings. One reason is that materials and labor costs are up. In the \$10,000 to \$12,000 range of homes, costs are up \$800 to \$2,000—and, of course, are reflected in the selling price. Contractors insist that the buyer gets a better job now than he did a few years ago, when the contractor had to use what materials he had, but that's scant comfort to the lower-bracket income purchaser.

On a \$10,000 home, the buyer has to make a down payment of \$2,300 (a veteran pays \$1,300 under a VA loan), and the low-income buyer just doesn't have it. So the trend is toward higher-priced dwellings, on the theory that the man who can afford to look at a \$12,000-up home can afford the down payment.

• **Plenty of Materials**—So far, the materials shortage bugaboo has kept out of sight. Most contractors report that steel is beginning to get tight, but otherwise few builders are having any real trouble in getting supplies. Only worry is mounting costs.

• **The Survey**—Coast to coast, the pattern was pretty much the same: Although Regulation X was the No. 1 whipping boy, builders pointed accusing fingers in other directions:

• Tightening up of the mortgage market, to keep in line with the Federal Reserve Board's policies in combatting inflation. Growing shortages of money for investment in FHA and GI loans—where interest rates are fixed—are reflecting on building volume.

• Uncertainties regarding costs of construction and materials.

• Fear that materials shortages will crop up later.

That's the general over-all picture. But it varies slightly from region to region. Here are a few examples:

New York: Estimates are that 1951 starts will drop as much as 60% below last year. Costs are up 15%. Materials, particularly steel, are hard to get.

Chicago: Residential building is following a normal seasonal pattern, but at a level about 30% below last year. Construction costs are up from \$2,000 to \$2,500—so are housing prices. No serious shortages, though steel pipe, galvanized sheet, and hardware are hard to get.

Pittsburgh: Allegheny County expects to total about 7,500 starts—about 6,500 below 1950's. One reason is

rationed gas connections. Costs are up from 8% to 30% over 1950.

Cleveland: Starts will drop to between 8,000 and 10,000, compared with last year's 15,000. Materials can be had, but gypsum products are short. Costs are up 20% to 25%.

Seattle: Construction way down, affected by Regulation X, lack of mortgage money, and confusion and uncertainty over war situation.

Houston: Starts down from 12,000

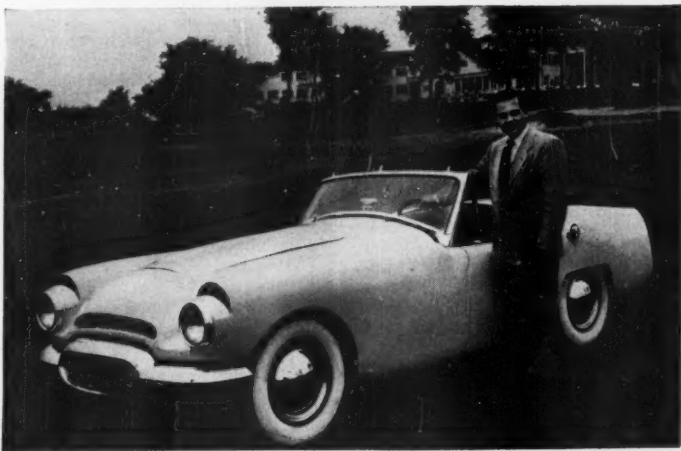
to 8,000. Practically no medium-priced homes available, but plenty of apartment space.

Cincinnati: It's a boom. Residential awards in May were up 27% over last May. There's a shift to an older type of home buyer, which means higher-priced housing.

Los Angeles: Even without government action, single family dwellings would have been slowed down, because city was overbuilt.



\$20 Toy ... and ...



... \$25,000 Toy

Auto designers have come up with two contrasting new models. One (top) is a fish-tailed Kidillac made by Garton Toy Co. of Sheboygan, Wis., from designs by Harley Earl, top GM designer. Three models are offered—standard and de luxe roadsters and a fire chief's car—at \$19.50 to \$24.

The other car is not intended for children

—or for many grownups. It was custom-built for the makers of Johnson's Wax at a cost of \$25,000. After being featured in a name-the-car contest this summer, it is being presented to Ted Williams, Boston Rex Sox slugger. It was designed by William Flajole of Detroit (in picture) specialist in European sports cars.

CMP

and Ryerson Steel Service

As you know, the Controlled Materials Plan went into effect July 1. The full extent to which CMP will affect our own operations and those of our customers is difficult to predict. But as of July 1, we are required by law to give the following precedence to orders for steel from stock:

1. Orders backed by CMP directives. These emergency CMP allocations of steel by the National Production Authority get the highest priority, as they did under CMP during World War II. Since directives are primarily placed with steel producers, the warehouse tonnage involved may not be large, but the kinds and sizes are likely to be those most in demand.

2. Authorized Controlled Materials orders. These orders, authorized by Government Agencies or Industry Divisions under CMP, received second highest priority, and they will probably account for a larger proportion of warehouse steel. A typical authorized Controlled Material order might bear the allotment No. K2-3Q51 in which K stands for the Agency or Division making the allocation; 2 represents the specific program involved, and 3Q51 stands for the calendar quarter in which the authorization is valid. It should be noted that the symbol DO-K2, used in conjunction with the K2-3Q51 authorization, is extended only for the purchase of finished products, such as chain, wire rope, fastenings, etc., or for non-controlled materials such as

plastic or babbitt, and is not used when ordering controlled material such as steel. Another important note: The NPA has just set up a blanket authorization to be used by manufacturers of certain products who require only small amounts of carbon or alloy steel for production purposes. The symbol employed is SU. For details see Direction No. 1 to CMP Regulation No. 1.

3. Orders bearing the old NPA DO ratings and calling for delivery before October 1, 1951. These orders bearing the DO symbol plus two digits such as DO-97 for Maintenance & Repair or DO-21 for Miscellaneous Defense requirements will remain valid during this change-over quarter, which ends October 1. Until then they have third highest priority.

4. Non-rated orders. With our tonnage considerably under last year and demand higher than ever, we may not be able to fill many of these non-rated orders—much as we would like to. For, of course, shipment depends on our having the steel in stock, no matter what the priority. But you can be sure that we will always do everything possible to help you get the steel you need.

* * *

IT IS IMPORTANT, therefore, that you give us the highest rating to which each order is entitled. And, in the case of oral or phone orders, be sure to send a written confirmation, including the rating which applies, within 15 days. As we are required to report all cases in which confirmation is not received, your cooperation on this point is important.

We appreciate the fact that many questions are bound to arise under the changing regulations prevailing today. So please remember that we are always glad to work closely with you on your steel procurement problems. Just call our nearest plant.

REQUIRED FOR CMP STEEL ALLOTMENTS.

One of the following CMP Forms must be used by manufacturers filing with NPA for authorization of schedules and allotment of steel.

Form CMP-4A. For prime and sub-contractors of Class A products.

Form CMP-4B. For manufacturers of Class B products.

Form CMP-4C. For prime and sub-contractors engaged in construction work and for manufacturers of Class A products used in such construction.

In addition, you may find helpful information in CMP Reg. No. 4 which concerns the controls governing the steel warehouse industry. For copies contact the National Production Authority's regional or field office near you.

RYERSON STEEL

STEEL-SERVICE PLANTS AT: NEW YORK • BOSTON • PHILADELPHIA • DETROIT • CINCINNATI • CLEVELAND
PITTSBURGH • BUFFALO • CHICAGO • MILWAUKEE • ST. LOUIS • LOS ANGELES • SAN FRANCISCO



fishin' is fun ... with care on the run

Here's a fellow that enjoys complete relaxation. He knows his plant is safeguarded from fire . . . a short circuit, a stray spark, a forgotten cigarette or spontaneous combustion can't cut into production time, destroy valuable records or endanger the lives of employees.

You too, can have this same peace of mind about fire by fully protecting your investment in materials, equipment and buildings with modern, approved C-O-TWO Fire Protection Equipment.

No matter what your property . . . factory, mill, warehouse, power station or research center . . . or a particular fire hazard such as spray booth, dip tank, pump room, electrical equipment enclosure or record vault . . . there is a type of C-O-TWO Fire Protection Equipment that gives you fast, positive action the instant fire strikes. Whether it's a C-O-TWO Squeeze-Grip Carbon

Dioxide Type Fire Extinguisher for an incipient fire, or a C-O-TWO Built-In High Pressure or Low Pressure Carbon Dioxide Type Fire Extinguishing System for total flooding an entire fire hazardous area . . . C-O-TWO means experienced engineering that assures you of the best type equipment for the particular fire hazard concerned.

For example, at many locations a C-O-TWO Combination Smoke Detecting and Fire Extinguishing System is a "must". The first trace of smoke in a protected area sounds an alarm . . . then fast, clean, non-damaging, non-conducting carbon dioxide blankets the fire, putting it out in seconds, before it spreads and causes extensive damage.

So, let an expert C-O-TWO Fire Protection Engineer help you in planning complete and up-to-date fire protection facilities now. Write us today for complete free information . . . our experience is at your disposal.



C-O-TWO FIRE EQUIPMENT COMPANY

NEWARK 1 • NEW JERSEY

Sales and Service in the Principal Cities of United States and Canada

Affiliated with Pyrene Manufacturing Company

MANUFACTURERS OF APPROVED FIRE PROTECTION EQUIPMENT

Squeeze-Grip Carbon Dioxide Type Fire Extinguishers • Dry Chemical Type Fire Extinguishers
Built-In High Pressure and Low Pressure Carbon Dioxide Type Fire Extinguishing Systems
Built-In Smoke and Heat Fire Detecting Systems

BUSINESS BRIEFS

Federal agencies in Vermont refuse to withhold state taxes from their employees' income as required by a new state law. All but the U.S. Marshal there say that the law, which went into effect July 1, doesn't apply to them. They stand on a ruling by the U.S. Comptroller General on a similar law in Oregon in 1948.

Macy's and Gimbel's ad slogans are under Federal Trade Commission scrutiny. Macy's (save 6% for cash) and Gimbel's (nobody but nobody) were mentioned specifically in a complaint to FTC filed by New York's Better Business Bureau as tending to mislead and deceive the public.

Five out of seven families told the University of Michigan's Survey Research Center they think this is a bad time to buy consumer goods. The 1,000 families questioned were "overwhelmingly in favor" of price control. The majority said government savings bonds were their favorite investment.

Standard Oil of Ohio cut prices 17% on its Atlas storage batteries. Earlier, Sohio had predicted a price increase on batteries this fall.

Ninety new airplanes will cost Eastern Air Lines \$100-million over the next two years. Eastern will take 72 of its present 92 ships out of service, replace them with 30 Super Constellations, 60 twin-engine Martin 4-0-4's—all convertible to jet power "overnight."

Sex hormones can't be sold without prescription—not unless the Supreme Court reverses two decisions won by the Food & Drug Administration against two California mail-order drug houses. FDA warns that misuse of sex hormones may cause "irreparable injury" to reproductive organs, stimulate cancer, induce sterility.

Back in TV production after 3½ months of virtual shutdown, Stromberg-Carlson recalled 300 employees, posted price cuts of \$10 and \$50 on two radio-TV models.

Ford will build wing sections for the B-47 swept-wing jet bomber at a new plant near Kansas City. It will supply the sections to Boeing, Douglas, and Lockheed.

Net working capital of U.S. corporations hit a new high of \$77.8-billion in March, says the SEC's latest quarterly estimate. That's \$2-billion higher than the total at the end of last year.



***Ever
hear of a bank
that
gave money away?***

Every day, a bank gives away tens of thousands of dollars in exchange for checks drawn on other banks.

These checks are worthless pieces of paper until they're cleared at a central clearing house. Until that time, the bank has literally given its money away!

It's vital for a bank to keep its books

balanced by clearing these checks in the shortest possible time.

Yet their central clearing houses are hundreds of miles away from many banks!

What do they do?

They make a wise investment! They ship their checks the fastest possible way — by Air Express!

Whether your business is banking or ball-bearings, here are the unique advantages you can enjoy with regular use of Air Express:

IT'S FASTEST — Air Express gives the fastest, most complete door-to-door pick up and delivery service in all cities and principal towns, *at no extra cost.*

IT'S MORE CONVENIENT — One call to Air Express Division of the Railway Express Agency arranges everything.

IT'S DEPENDABLE — Air Express provides one-carrier responsibility all the way and gets a receipt upon delivery.

IT'S PROFITABLE — Air Express expands profit-making opportunities in distribution and merchandising.

For more facts call Air Express Division of Railway Express Agency.



LABOR



JUSTICE JACKSON wrote Supreme Court opinion that laid the groundwork. Result: . . .

Most CIO Union Shops Voided

Nearly 5,000 CIO contracts become illegal, under Labor Board ruling, because top officials had not signed non-Communist affidavits when elections were held.

CIO unions were moving swiftly this week to cushion a stunning blow dealt to their security by the National Labor Relations Board.

At one swoop the board ruled: (1) that more than half of all union shop and maintenance of membership clauses in CIO contracts were unlawfully made, and (2) that those contracts no longer barred representation elections. Rival unions were thus invited to move in, unless the gaps were plugged—and plugged quickly.

Some employers matched labor in their apprehension over the possibility that a Pandora's box had been opened.

• **High Court Rules**—The contracts in jeopardy are the union shop agreements worked out between June, 1947, when the Taft-Hartley act was passed, and December, 1949, when top CIO officials finally submitted non-Communist affidavits. During this period, both CIO and NLRB considered that only officials of individual unions need submit affidavits.

Last May the Supreme Court upset the appellation. Justice Jackson wrote a decision holding the law binding on officials of the CIO as well as of its component unions.

And last week NLRB indicated that Jackson's ruling invalidated all union shop elections and agreements worked out during the 2½-year period.

• **CIO Hit Hardest**—NLRB's action struck hardest at the CIO, which had made about 4,700 union shop contracts under Taft-Hartley before the affidavits were filed. Another 2,300 made since then are not affected. A scant 30 AFL contracts were invalidated by the board's ruling.

For CIO, the disruptive possibilities were enormous unless the unions and employers acted swiftly to restore the standing of their contracts as bars to elections. CIO counsel promptly alerted all affiliates to take the available remedies.

After they have done that, the stunned and angry union leaders will have to retrace the burdensome procedure of seeking new union shop elections. They face the threat of suits for unlawful discharges and payment of lost wages. Even some certifications are in doubt.

• **Technicality**—The root of the trouble was really a technicality. The Taft-Hartley law said officers of labor organizations had to file non-Communist affi-

davits to qualify for privileges under the act. But did it include parent organizations, such as AFL and CIO, or did it apply only to the international unions and their locals?

This was one of the first great debates stemming from Taft-Hartley in the fall of 1947. Robert N. Denham, then general counsel of NLRB, decided the affidavit requirement was all-embracing. John L. Lewis broke with the AFL leadership over the issue, snorting that it made labor's millions "second-class citizens." Philip Murray, president of the CIO, held out as a matter of principle, too.

The AFL officers filed affidavits Nov. 7, 1947. Murray held out until December, 1949, about two and one-half years after the Taft-Hartley act went on the books.

It is probable that Murray would have been pressured by affiliated unions into taking the oath much sooner, except for a decision by the NLRB itself in the fall of 1947 in the Northern Virginia Broadcasters case. There the board ruled that section 9 (H)—the non-Communist affidavit requirement—did not extend to officers of the parent federations.

• **High Court Rules**—On May 14, 1951, in the Highland Park case, the U.S. Supreme Court, in an opinion written by Justice Jackson, decided the board had erred in its interpretation of the filing provisions of the act. That's when the blow fell, but few realized it then.

• **Ford Case**—Last week the NLRB lowered the boom in the Ford Motor Co. (Canton Forge Division) case, where the AFL blacksmiths had asked for a representation election.

The United Auto Workers (CIO) had contended that, under NLRB doctrine, its contract with Ford was a bar to an election. The blacksmiths argued that under a footnote to that doctrine (the C. Hager & Sons Hinge Mfg. Co. case, decided in November, 1948) a contract that normally is a bar to an election ceases to be a bar when it contains an unlawful union security clause.

The board decided that in the light of the Supreme Court's Highland Park decision the AFL union's point was well taken. The board paused for breath at that point. It did not take the further step of ordering an election. Instead it said a question remained and decided to hold oral argument on that.

• **Counterblasts**—CIO lawyers were furious. They protested that the board had gone out of its way to appease political elements that delight in seeing unions harassed. There were heated charges that chairman Paul M. Herzog had an overriding ambition to be a Circuit Court judge and a collateral



NLRB CHAIRMAN Herzog, blamed by CIO, asks: "Why would we make work for ourselves?"

desire to maintain a safe relationship with the Senate.

The NLRB denied it had stretched a point. A spokesman said: "Why should we make all this work for ourselves? Our appropriation and our staff are being cut. Important cases will be pushed back while we take on 4,700 elections."

• **Embarrassing**—CIO lawyers seem to have overlooked one point. Since the Supreme Court's Highland Park decision, they themselves had filed a motion based on the same case. That was when they supported the Metropolitan Life Insurance Co.'s position in a case brought by the left-wing United Insurance Agents of America, legatee of the United Office and Professional Workers of America. The CIO, having bounced UOPWA and its relatives, wants "in" at Metropolitan.

As a CIO union, the UOPWA had sought and won a collective bargaining election at Metropolitan. Later the union charged a refusal to bargain. Last September the NLRB directed the company to bargain with UOPWA's offshoot.

When Metropolitan argued, on the basis of Highland Park, that the former CIO union's action must be dismissed because the affidavit requirement was unfulfilled at the time the petition was first brought, the CIO added the view:

"There can be no question that the complaint must now be dismissed and any orders issued thereon be vacated. . . . The order to bargain must be withdrawn. This is the precise holding of the Highland Park case, and no alternative disposition seems possible."

NLRB this week took precisely that view. It vacated its order to Metropolitan to bargain and dismissed the

representation petitions, thereby vacating the UOPWA certification. The CIO admitted no inconsistency in its position.

• **The Alert**—The CIO lost little time in alerting its affiliates. Wires went out to all union presidents advising them to:

• **Negotiate** supplementary agreements taking the union security clauses out of operation. The supplement could provide that the compulsory membership provisions would apply only when all federal law and regulations had been satisfied.

• **Notify** the employees. This is vital under the board's recent Monolith Portland Cement decision.

• **File** for a new union shop election.

Where the labor-management relationship is an easy one, such action is a handy solution to one facet of the problem. It will restore the contract to its status as a bar to an election.

• **Raiding**—But what about raiding?

There are broad areas where the CIO is in no danger at all. Steel contracts, for instance, are not likely to be affected. In some jurisdictions there is no competition of consequence, anyhow. The Ford-UAW contract is a possible trouble area. But the UAW has an agreement with its nearest competitor, the AFL Machinists Union, and it is doubtful whether other unions are in any position now to make a quick intercept.

The CIO unions most likely to be vulnerable are those that filed for union shop elections early in the game and that are normally most subject to raiding. In that category seem to fall the Paper Workers, the Gas, Coke and Chemical Workers, and perhaps the Wood Workers and Brewery Workers.

• **Amity as Usual**—Some local conflicts are bound to arise, but no great strain on current AFL-CIO amity is foreseen. A top AFL official acknowledged there was AFL-CIO competition in some jurisdictions, but said, "It certainly wouldn't result in an AFL drive or campaign."

James Brownlow, president of the AFL metal trades department, said, "I can't visualize our taking advantage of it."

• **Big Job**—The job of minimizing the effect of the NLRB's Ford decision imposes a huge burden on the CIO unions and the board itself.

Both the unions and the board will need time—time for the insurgents and the disgruntled to make hay—for a refusal to pay dues during that hiatus can not be punished under the provisions of the law.

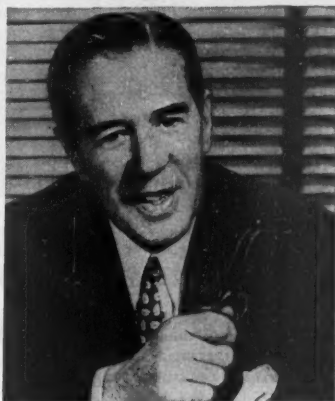
• **Firings**—And what about discharges under union shop clauses now found to be unlawful?

There have been some firings, of

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course, and some charges already have been filed with the NLRB. Ironically, the unions will be protected from most of the possible charges by the six-month statute of limitations, a Taft-Hartley provision that was not originally inspired by solicitude for the unions.

• **Certifications**—Theoretically, around 1,500 CIO certifications in the 1947-1949 period are in jeopardy. The CIO isn't greatly worried about trouble there. In general, certifications issued that far back either have matured into safe labor-management relationships, or the unions are up against tremendous resistance, anyhow. The focus of such resistance is in the South.

All this sand in the gears of labor-management relations may have a compensating factor. It may jolt Congress into repealing a provision that nearly everybody has come to regard as unrealistic—the union shop election. The AFL building trades unions were reported already soliciting Senator Taft's aid on that.

An immediate repeal of this one subsection of Taft-Hartley would be consonant with the current economy trend in Congress, besides averting widespread, costly friction. But any fast enactment would be quite a feat while the congressional docket is as jammed as it is now.

Defense Layoffs Build Trouble

Labor-management relations are strained as production is curtailed to make way for mobilization program. Detroit is feeling the pinch as auto plants reduce schedules.

Reduced employment—coming from materials shortages, production cutbacks, and allocations—is breeding new labor headaches for management. You can see that clearest in Detroit. With auto production off, plants are reducing work schedules. And they are running into labor troubles for doing it.

• **Different Forms**—The difficulties are taking various forms:

• **Day-to-day stoppages** at Hudson Motor Car Co. followed a cut in Hudson's assembly-line speed and a cut in the plant work force. The United Auto Workers (CIO) complained that remaining workers had to work too hard to keep up with the assembly line (BW—Jul. 14 '51, p. 34).

• **Speedup charges** by UAW's sprawling Local 600 at the Ford Motor Co. plant have workers at the Rouge in a stew.

• **Wildcat strikes** at the Plymouth plant of Chrysler Corp. followed disciplinary action against two employees who refused to do work reassigned to them in another cutback.

• **Things To Come**—These unconnected incidents may show the stand UAW and other unions would take in a situation that hasn't come up since CIO developed into a solid, formidable force: downhill employment.

The way it now looks, unions will fight grimly to see that lower work schedules cost members as little as possible.

At the same time, it seems evident that management will try to take up some of the slack in its work force—to improve efficiency in a way that couldn't be seriously attempted while volume and markets were both assured.

• **Shift to War Production**—The last widespread layoffs in the auto indus-

try came in 1938, but UAW wasn't strong enough then to be any real challenge. In early 1942, during the conversion to war work, layoffs weren't so bad as they were expected to be, so UAW sat tight.

The shift from war production in 1946 brought no serious layoffs since a quick and great expansion of auto manufacturing followed.

This time, layoffs now beginning could extend further than in 1942; auto plant shifts into war production may be many months away.

• **SOS**—While fighting to keep as many men as possible on the job, UAW isn't dodging the fact that some layoffs will have to stand. Drumming for aid has begun in two different sectors of UAW—aimed in both instances at Washington.

Officials of UAW's Chrysler Dept. went to Washington last week, asked the government for: (1) relief from allocations that have crimped auto output; (2) adoption of Walter Reuther's program for speeding machine tool output (BW—Jul. 7 '51, p. 28); (3) enlargement of present steel capacity; and (4) higher jobless-pay benefits for idle workers.

Meanwhile, the insurgent Ford Local 600—always important because of its 65,000-member size—called for military orders for the Rouge and for \$60 a week in unemployment benefits from Washington, in addition to state jobless-pay benefits, for workers idled by production cutbacks.

Local 600's proposal had a double significance: It was both a proposal aimed at helping workers caught in layoffs and a bid for rank-and-file support of the local's anti-Reuther officers (BW—Jun. 9 '51, p. 32).

Dead weight "hits the skids"



High-strength U-S-S COR-TEN makes these auto-loading trackways 38% lighter... saves weight, saves work, saves steel.

WITH these steel skids, loading and unloading an auto trailer is a fairly simple matter. But the design of the skids themselves presented quite a problem.

They had to be reasonably low in price. Though 12 feet long, they had to be light enough for a man to handle easily. Strong enough to carry the heaviest automobiles. Able to resist very severe eccentric loads and dynamic shocks due to sudden stops when the cars are loading. Yet, because running-board clearance of the new cars is so low, the skid side flanges could not be more than $2\frac{1}{2}$ " high. Here really was a designer's headache.

The engineers of Mechanical Handling Systems, Inc., Detroit, Mich., successfully met all these requirements by using U-S-S COR-TEN. They built the track of 18-gage COR-TEN, side rails of 12-gage. Even with large holes punch-

ed out to reduce weight, these COR-TEN skids have strength to spare. Yet they weigh only 95 lb. each, instead of the 154 lb. required when built of carbon steel. (They'll last a lot longer, too, because the atmospheric corrosion resistance of COR-TEN is 4 to 6 times that of carbon steel.)

Mechanical Handling Systems, Inc., was already well acquainted with the weight-saving possibilities of COR-TEN construction. Several years ago they redesigned the trailers on which these skids are used, with thinner COR-TEN sections, and reduced trailer weight by 31%, or 2,000 lb.

This typical application of U-S-S COR-TEN illustrates the benefits you

can obtain with U-S-S High Strength Steels. These stronger, tougher "steels that do more" have lifted the costly drag of dead-weight off freight cars, buses, trucks and trailers. By their use, hot water tanks, refrigerators, liquid gas cylinders as well as earth-moving equipment of gigantic size, have been built lighter, longer lasting and cheaper to maintain. All at very little, if any, increase in cost.

Remember, by saving weight with these U-S-S High Strength Steels you also save steel. By building lighter with them, you get more product units from each ton of steel you use, so your steel supply goes further. Our engineers will gladly assist you in their application.

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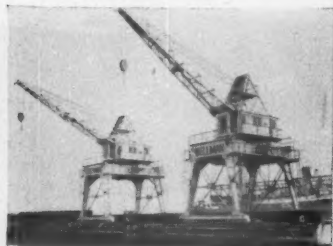
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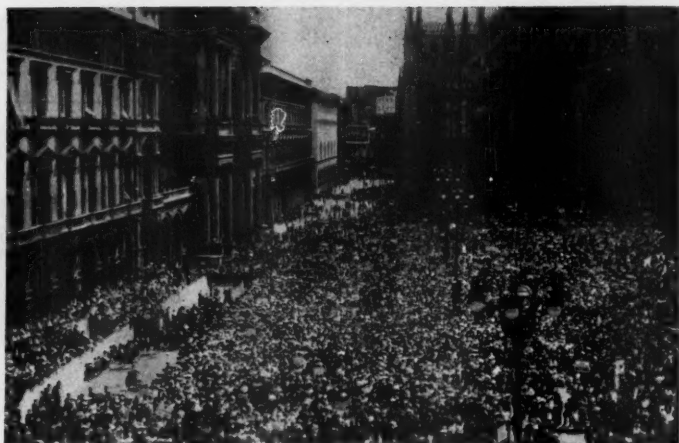
Shore battery of 34 Wellman Cargo Cranes waits for ships to tie up at New York docks. Several cranes can be put to work on one ship—one to a hatch—unload directly to trucks or cars.



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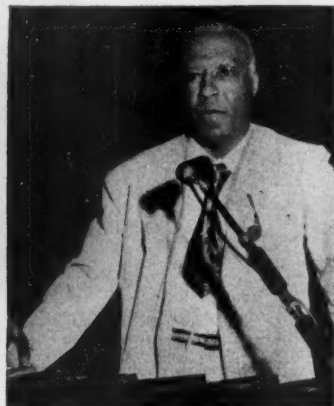
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MANY FAINTED as 80,000 trade unionists jammed into Milan Square on July 8 to show support of the world conference. Famous Milan Cathedral is in right background.



JOE CURRAN of NMU was a CIO delegate who spoke at the world conference.



PHILIP RANDOLPH, head of Sleeping Car Porters, was another U.S. speaker.

World Congress of Unions

Though disguised, lest it give Communist propaganda a further opportunity to charge American dominance of non-Communist unions abroad, U.S. influence was almost unchallenged at the international labor meeting that ended its sessions in Milan, Italy, this week. It was exerted through American union delegates who came from AFL, CIO, and independent unions.

The U.S. State Dept. might not want to sponsor all the positions taken by the International Confederation of Free Trade Unions. But it would not seriously quarrel with any of the resolutions passed by representatives of 53-million workers who met

in Milan. The cold war has made the work of the big United States unions abroad virtually a State Dept. enterprise.

In actual fact, once the U.S. unions are willing to promote American policy abroad, they can be much more effective than any official government agency in an area that really counts: the foreign unions. An anti-Communist labor organization in France, for example, would be utterly discredited if it took financial help from the U.S. government. Getting such help from the AFL or CIO, or from the dues the American unions pay into ICFTU, is another matter.

Similarly, the proffer of trained staff



GIULIO PASTORE, secretary general of Italian unions, addresses the big rally.



A LISTENER at the conference was Luigi Antonini, ILGWU vice-president.

Supports West

—publicity men, organizers, negotiators—to struggling anti-Communist unions in Italy and elsewhere would be refused if it came officially from the government. Coming from ICFTU it is welcomed.

The Milan meeting recognized the decisive help U.S. unionists were giving anti-Communist labor organizations from Indonesia to Trieste. And because the Americans saw eye-to-eye with the other delegates on major policy issues, the work of U.S. unions abroad will now be stepped up.

Turning homeward after the sessions, some of the American delegates wished that they could get along as well in their own country as they do abroad.



The Man of Decisions ...the General Manager

As a top executive, the General Manager is called upon to make very few decisions. That is because only the major problems come to him for consideration.

It is a recognized fact that a company is only as strong as its general manager. To be efficient, he surrounds himself with capable men whom he invests with whatever power is required to run his organization. These men—divisional or department heads—in turn, have under them men qualified to produce the work with which they are charged—and so on down the line.

In a well-organized enterprise, all problems are met and solved as near as practicable on their own levels.

Only where something deviates from the standard, accepted policy is there a necessity for the General Manager, as a member of management, to step in and make the decisions.

Decisions are generally the result of recommendations that come up from a lower level.

Whenever a problem reaches the point where the General Manager must make the decision, the responsibility becomes his, and he will not, if he is of the right sort, be inclined to palm off the blame to an underling should the result be disappointing.

Perhaps most of the decisions that a General Manager is asked to make involve (1) changes in policy, (2) expenditures of money for equipment or replacements, or for expansions or the manufacture of new products, (3) clearing programs proposed by divisional heads.

Wolverine has proved quite valuable many times in making decisions for manufacturers (as mentioned in Point Two) in cases where they faced problems of making tubular parts and assemblies with which they were unfamiliar.

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LABOR BRIEFS

Economic Stabilizer Johnston withheld his O.K. on a WSB order to let employers meet prevailing industry or area practices on vacation, holiday, premium, and call-in pay. He asked WSB to make approval of added fringe benefits conditional: The employer must not ask price relief due to higher labor costs.

Public members George Taylor, Nathan Feinsinger, and John Dunlop may leave WSB next fall. They have made plans to return to university teaching posts in September.

WSB approval of a 10% pay boost for 150,000 CIO employees of eight Bell Telephone companies gives them a total 12% raise since January, 1950—or more than WSB's 10% ceiling. Board O.K.'d the full raise, explaining it didn't alter minimum or maximum rates but just affected in-between scales.

Dope exposé in New York may set off a purge of addicts in Local 802 of the American Federation of Musicians (AFL). The local complains that jazz musicians, particularly, are branded "moral risks," since the probe spotlighted use of narcotics by a few musicians. AFM laws permit ousting of dope addicts.

The shrimpers' strike that closed Mississippi shrimp houses ended last week when 100 fishermen outside the state joined the Gulf Coast Shrimpers' & Oystermen's Assn. (AFL) and agreed to go by its rules and prices. They had been selling shrimp in the state below prices set by the union.

Critical occupations listed by the Dept. of Labor now include power-cable splicers and power linemen. The complete list of 58 jobs can be obtained from the Joint Commerce-Labor Committee on Essential Activities & Critical Occupations, Room 7326, U. S. Dept. of Labor, Washington 25.



Pretty Smiles Make a Solid Picket Line

Office-worker pickets in jeans and summer sweaters found a smile and plea for help was enough to get factory workers' aid in closing Addressograph-Multigraph Co.'s Cleveland factory last week.

The 600-odd office employees, members of the Office Employees Union (AFL), want the same 11¢ an hour in raises won this year by factory workers—2,500 members of the International Assn. of Machinists (AFL).

The company offered 6¢ an hour. It argued that IAM got 5¢ to adjust "in-

equities" between jobs and only 6¢ as an actual pay hike. Also, the company said, 6¢ is all it can give the office workers without prior Wage Stabilization Board approval.

When bargaining bogged down, the office workers walked out on July 6. Other Cleveland unions, with more picketing experience, offered help. The office workers didn't need it. IAM workers stopped at the white collarites' quiet, comely picket line, shutting down the plant a week in advance of a scheduled two-week vacation shutdown.



"NO, NO, SKIPPY... THAT'S MINE!"

"**T**OUGH luck, Billy, but accidents *do* happen. Ask Dad if he'll buy you another cone!"

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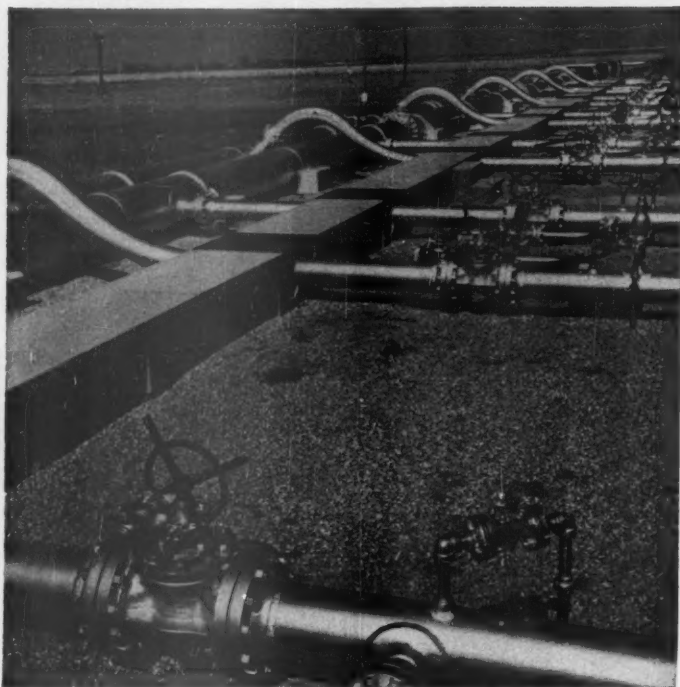
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RESOURCES



GATHERING LINES spreading out through the natural gas fields raise the question . . .

Can FPC Control Gas Wells?

Decision in the Phillips case will determine whether gas is priced at cost or at what the traffic will bear. Big issue is whether or not the commission has control at the wellhead.

The record closed last week on a three-year dispute over natural gas pricing. The issue: Shall the gas that producers sell to pipelines be sold at a price based on cost or for what it will bring?

That's the gist of the Phillips Petroleum Co. case in which oral argument ended last week before the Federal Power Commission. Now FPC—and the courts—must decide.

Final decision could take as long as three years; both parties agree that FPC's verdict surely will go to the Supreme Court. Whenever it does come, the final judgment will affect where and how natural gas is used.

• **Looking Back**—The Phillips case began in October, 1948. But the whole thing really started back in 1938. That was the year Congress passed the natural gas act—exempting production and gathering of natural gas from FPC

regulation. Gas producers cherish this exemption, because FPC allows prices that yield only the cost of doing business and about a 6% profit on depreciated investment. That's standard practice in the utility business. But gas producers insist they're not utilities—even though much of their output goes to utilities.

In 1946 the Supreme Court upheld an FPC order that qualified this exemption under specific circumstances. In O.K.'ing this modification, the court used language that made it appear that FPC control might reach out to all gas producers, not just those covered by the circumstances of the particular case.

• **Fighting Mad**—That made the producers see red. After years of a thin regional market, natural gas was booming. New pipelines were tapping the nation's big metropolitan markets.

Zooming coal and oil prices were making it easy for millions of new customers to afford gas. Broadened demands, far from satisfied even today, were shoving up wellhead prices. Producers growled that it was not time for Washington to start holding prices down.

They argue that production already is regulated by the states for most efficient use of gas and oil reserves; that FPC control would create a conflict between federal and state regulation. Too low a ceiling on gas prices, they say, would discourage exploration, rob consumers of reserves to meet potential future demand. And in any case, they say, cost of gas at the wellhead is only a minor part of the price the consumer pays when it finally is piped to him.

At first FPC seemed to agree. It put out an order saying it would not take jurisdiction. Then there were some new appointments to the commission, and some of the old members changed their minds. So FPC canceled its order.

• **Divided Ranks**—A deep split—not ended yet—divided FPC's membership. Those who began to lean toward controlling the prices at which pipelines buy gas from producers argued that field prices were rising, might soon squeeze customers. And, they said, control of gas reserves was centralizing in a few hands, presaging unchecked monopoly pricing in the field.

In any case the Supreme Court had practically invited FPC to take jurisdiction, and it is hard for any federal agency to pass up that kind of invitation.

While FPC was changing its mind, Congress was trying to push through a law to keep gas production and gathering out of FPC's range. But the Moore-Rizley bill never did pass. Last year the Kerr bill got through Congress, then was vetoed.

The political lineup found producing states urging gas act amendments, consuming states opposed. And there are more consumer than producer votes.

• **Starts Proceedings**—While the producers fumed at Congress, FPC went around end. Under pressure from Detroit, FPC started an investigation of the Phillips Petroleum Co., one of the largest gas producers. Phillips sells gas to the Michigan-Wisconsin Pipeline Co., which wholesales to Detroit.

As Michigan-Wisconsin expanded its take from Phillips in several stages, Phillips' price rose. Dismayed at the steady increases, Detroit asked FPC whether Phillips might not be subject to FPC regulation in view of the 1946 Supreme Court decision. If it were, Phillips' rates might be found out of line.

• **Spurred On**—FPC's investigation of Phillips dragged while the Kerr bill was

in Congress, speeded up after the veto. Last spring public hearings were ordered at Bartlesville, Okla. Phillips asked that they be limited to whether Phillips is subject to FPC regulation, skirting for the time being the question about its rates.

FPC agreed, over the violent protest of Commissioner Buchanan. He maintained that it might take three years to decide finally on the rates if FPC found that it could, indeed, regulate Phillips.

Final stage of the investigation ended last week with oral arguments. All that remains is FPC's decision and whatever court action follows. Aside from the slim chance of reargument and rehearing, the record is closed. FPC will decide on the basis of that record. And the courts will make their reviews solely on the law, not the facts—having once satisfied themselves that the facts are numerous and broad enough to support whatever decision FPC should finally reach.

• **Results Clear**—Whatever the outcome, it's not hard to foresee the effects. Should Phillips be held subject to regulation, the oil business is bound to take a dim view of sales to pipeline companies. Oil companies control well over half of the proven gas acreage. And sales at cost-plus-6% are far less attractive than sales for what the traffic will bear.

That could make it much harder for pipelines to get gas supplies for further new markets. The oil companies won't have to sell to pipeline companies. They can stay clear of the utility field and push sales to their other markets—such as industrials, chemical plants, refineries, carbon black producers (BW—Jul. 7 '51, p98), synthetic chemicals. And all the while they will fight to get out from under FPC's thumb.

An FPC decision against Phillips would ring in another big problem, too: FPC's insistence on depreciated investment. Suppose a well produces both oil and gas? How do you allocate operating costs and investment between the two? Suppose the well's past output already has retired the investment? At what property value does the well enter the rate base on which the 6% may be earned? These are just some of the complications that lead to independent oil and gas companies to dodge FPC regulation as a plague.

• **Underpriced**—Suppose Phillips is not held to be regulable by FPC. Then natural gas, certainly underpriced by comparison with coal and oil, would follow the field-price trend. And that trend is upward. Prices rose from 4.9¢ to 6¢ per mcf. between 1938 and 1947 for the country as a whole, and from 2.5¢ to 4.8¢ per mcf. in the Southwest, where the great bulk of the gas is to be found.

It pays to use your custom molder's know-how which includes WARP-PREVENTION in large parts

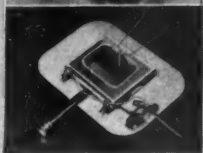
No. 28 in a Series on Plastics Skill at Work...

PRODUCT: Popcorn warmer base

CUSTOMER: Buddy Boy Popcorn Co., Elgin, Ill.

MOLDER: Richardson Co., Melrose Park, Ill.

MATERIAL: Durez heat-resistant black phenolic



PROPERLY DESIGNED RIBS, based on the molder's knowledge of plastics performance under varied service conditions, assured the customer of stability required in this molding. Heat produced by the element mounted in the molded warmer base causes no warpage or other dimensional change in this heat-resistant Durez piece, despite large size of unsupported area.

• "Hot" is the word on the popcorn warmer that pulls in the dimes. But heat presents problems involving design and the selection of materials... problems a custom molder knows how to help you overcome.

In this case the molder's experiments showed a heat-resistant Durez phenolic plastic to be the ideal material for the warmer base. Ease of production, impact strength, and self-insulation were assured. No protective coating is necessary, since the lustrous finish is integral in the molded Durez. Yet for this large unsupported molding... 15" x 12" x 5"... to give satisfactory service, it must remain dimensionally stable de-

spite daily heating and cooling.

Accordingly the molder suggested reinforcement with a system of molded-in ribs. The ribs furnish the rigidity that safeguards customer satisfaction, and in production they hold shrinkage within the narrow limits that always reveal good engineering in plastics.

Your custom molder is qualified in engineering ability, experience with plastics, and production facilities to help you use these "wonder" materials most profitably.

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Our monthly "Durez Plastics News" will keep you informed on industry's uses of Durez. Write, on office letterhead, to Durez Plastics & Chemicals, Inc., 4007 Walck Road, North Tonawanda, N. Y.



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Soft Coal Stocks Pile Up

Operators aren't worried about a miners' strike this year. Their problem this time: how to get home users to buy—to help unload mounting stocks.

The soft coal industry this week was facing up to an uncomfortable fact: Even in a booming defense economy the markets for coal aren't sufficiently large to keep all the mines working full time.

Overcapacity has hung over the coal industry for years. But since the end of World War II, periodic strikes and slowdowns have usually kept supply from outrunning the market. This year John L. Lewis is sewed up with a firm contract; there is no threat of a stoppage. And this year, coal is piling in stockpiles; mines are shutting down to a two- or three-day week.

Industrial coal is moving—slowly. But stockpiles of domestic coal are climbing very steadily, with no real relief in sight.

- **No Hurry**—Home users of coal are slow to buy—scared off by the high cost of laying in their winter's supply. And this year there is no call for them to rush out and buy. With the soft coal labor contract scheduled to run another year, they can be sure of getting all they want when they want it.

- **Not only** are coal users shying away from their coal dealer for as long as possible, but more domestic users are dropping off their coal dealers' lists every year—switching to natural gas and oil. Coal retailers in Cleveland have lost 60% of the customers they had in 1940 to oil and gas, and haven't been able to get replacements.

- **Relief**—The coal operators counted on the two-week July vacation of UMW miners to get users into a buying frame of mind again—and to chop a few layers off their stockpiles. But closing of the mines during the two-week period didn't cause a ripple on the market.

Stockpiles on June 1 were the highest since September of 1943. Industrial consumers and retail dealers held 74,807-million tons of bituminous and lignite coal—enough to last an average of 69 days, as compared with a 60-day supply on May 1. Normally, around 50-million tons are regarded as sufficient cushion.

Dr. W. H. Young, Bureau of Mines economist on soft coal, says the fact is plain that this country can produce some 30% to 40% more coal all the time than consumers can profitably burn—even with industrial activity speeded up.

- **Coal to Burn**—Bituminous coal consumption figures through last year tell

the story. In spite of the defense take, only two industries—electric utilities and steel—used significantly more coal last year than they used in 1949. Part of their increase reflects the defense industry boom, Dr. Young says, but altogether, the defense program hasn't yet increased coal consumption by more than 2%.

Consumption will be rising a little more this year. One coal marketing agency, Appalachian Coals, Inc., predicts that total coal usage will rise to 481,331-million tons this year from 453,113-million tons in 1950. Production for export use and bunker fuel is expected to nearly double at 50,826-million tons: it reached only 26,172-million tons in 1950.

But while usage is on the upgrade, so is production capacity. Mechanization has enabled the miners to turn out more coal per man than ever before. And this, coupled with freedom from labor trouble, will bring total production to 531,096-million tons of coal this year, compared with 512,000-million tons last year, Appalachian Coals forecasts.

- **Bright Spots**—All in all, with many mines already closed and others facing closing for lack of markets, the immediate future for the coal mining industry looks gloomy to coal mine operators. But most of the larger companies insist that the long-range view is not too dark.

Alvin W. Vogtle, vice-president of the DeBardeleben Coal Company, of Alabama, says there already is a trend back from oil to coal, largely because of international tensions. What's more, a permanent trend to coal will come later, he predicts, because coal represents major fuel reserves, while petroleum and natural gas reserves are comparatively small.

- **Sure Future**—Operators point, too, to the growing market for coal byproducts, such as aspirin, sulfa drugs, baking soda, insecticides, TNT, nylon, fertilizer, dyes, paints, flavors, perfumes, and plastics. And coal seams too thick or impure for mining can be turned into liquid fuel.

The extra capacity will continue to hang over the market, though. Even a long slump in sales doesn't cause mines to close up entirely. There's too much danger of flooding and cave-in. As economist Young says: "Coal mines neither die nor fade away—they just cut down to a two-day week."

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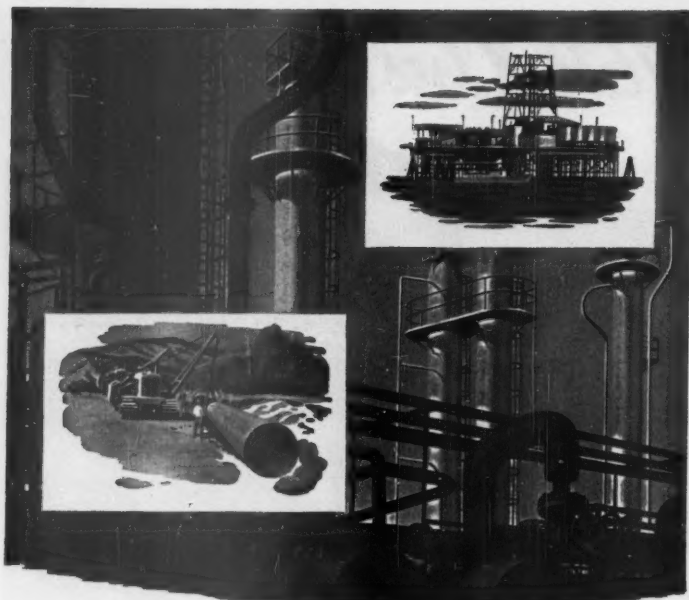


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Tidelands Impasse

States' righters win in House committee as Iran crisis brings need for oil. But deadlock on offshore control remains.

Threatened loss of Iranian oil has turned the flame a little higher on one of the back-burners of the U.S. Congressional stove. That's the burner where the tidelands oil dispute has been simmering slowly, ever since the Supreme Court ruled that the federal government, not the states, was boss of the offshore fields.

With the West facing loss of Iran's one-seventh of world crude production, there has been increased demand that Congress do something to get tidelands exploration and production going again.

• **Committee O.K.**—Last week the pressure brought some action. The House Judiciary Committee approved, 18-6, a bill that would turn tidelands authority back to the states. There's a good chance that the Rules Committee will push it along this week. That could mean House action and, possibly, approval when the Defense Production Act is out of the way.

There's a similar quit-claim bill bottled up in the Senate Interior Committee. Right now sentiment in both houses seems to be running toward the States' rights side.

But that doesn't mean that anything will happen for sure. Congress earlier passed another quit-claim bill, only to run into a Presidential veto. And President Truman has made it clear that he will repeat the veto if need be. What's more, there just aren't enough States' rights votes to override a veto.

• **Replacement**—Just about everyone is agreed that something should be done to provide a long-term replacement for Iranian oil. And the tidelands fields offer an obvious source for the desired supplies. That accounts for the present mild feeling that Congress may actually find a compromise on the federal vs. state claims. The trouble is nobody seems to be able to think of a formula to end the stalemate.

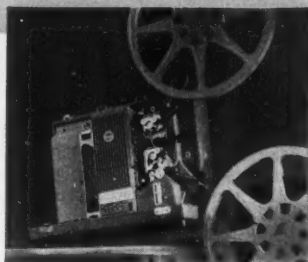
• **The Lineup**—The States' righters, now moderately in the ascendant, have their hard core in the congressional delegations from Texas, Louisiana, and California. Supporting them are congressmen from the inland oil-producing states, southerners who carry the States' rights banners in every fight, and quite a batch of assorted Republicans.

Lined up against them are the delegations from the oil-consuming states, especially big city congressmen, and the dyed-in-the-wool Fair Dealers.

For a time it looked as though an



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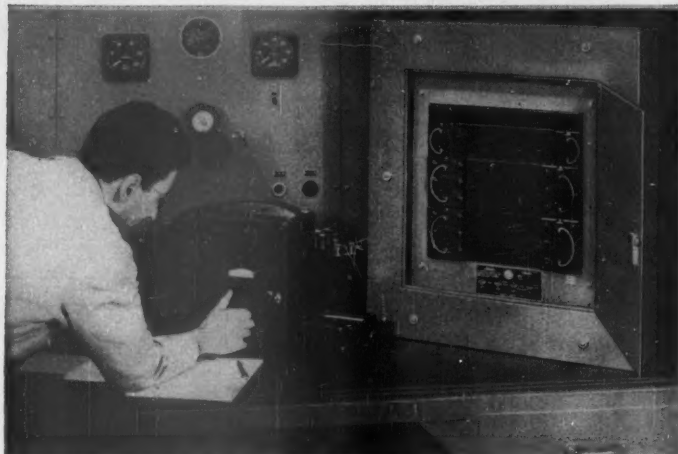
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Federal technician measuring temperature of internal thermocouples during heat test on Flexunit Panelboard

YOUR ELECTRICIAN, until recently, has had to order power distribution panelboards directly from a manufacturer. Each panel was custom-built to individual specifications and deliveries, if long delayed, were costly. Within the past year, however, Federal Noark has made it possible for electricians to meet practically any distribution panelboard requirement at a moment's notice.

Remarkable new Flexunit Panelboard

Underwriters' Laboratories, Inc., requires that panelboards pass stringent tests for such factors as heating, wiring space, spacing between live parts, and dielectric strength of insulation. With the development of the Flexunit Distribution Panelboard, Federal Noark became the first manufacturer to produce a full line of Underwriters' approved *panelboard components* that can be stocked by jobbers and sold by them to electricians for assembly into complete boards in a matter of minutes! Importantly too, Flexunits readily permit subsequent change of any circuit from one rating to another, and the quick addition of extra circuits.

Federal Plants from Coast to Coast

The Flexunit Distribution Panelboard is only one of a dozen Federal Noark developments of outstanding value to electrical jobbers, contractors and plant maintenance men. And leadership in the design and manufacture of control equipment has brought Federal a phenomenal growth. From Connecticut to California, five large Federal plants are today operating at full capacity to meet the call for Federal Noark products.

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" . . . federal supporters clutch at one small new straw . . . "

TIDELANDS OIL starts on p. 44

interim settlement might be found, putting off the final decision till later, but persuading the oil companies to start developing in the meanwhile. Such work, even exploration, has been dead as a doornail ever since the Supreme Court ruling. The companies aren't willing to spend money until they know what governmental units they must deal with.

• **In Escrow**—Key gimmick in the interim proposals is to put all or part of the royalties in escrow, to be divvied or allotted later. The catch: Who will control leasing and regulation during the interim period? All hands have a strong suspicion that the temporary boss is likely to end up permanent.

In the House, Speaker Sam Rayburn is pushing the quit-claim bill, which is making some progress at the moment. Rayburn is trying to get the best possible deal for his Texas constituents. His rock-bottom demand is state control.

In the Senate, Chairman O'Mahoney of the Interior Committee introduced a bill that would give control powers to the federal government. His bill would also:

- Recognize and legalize all existing oil leases issued by the states before the Supreme Court ruling.

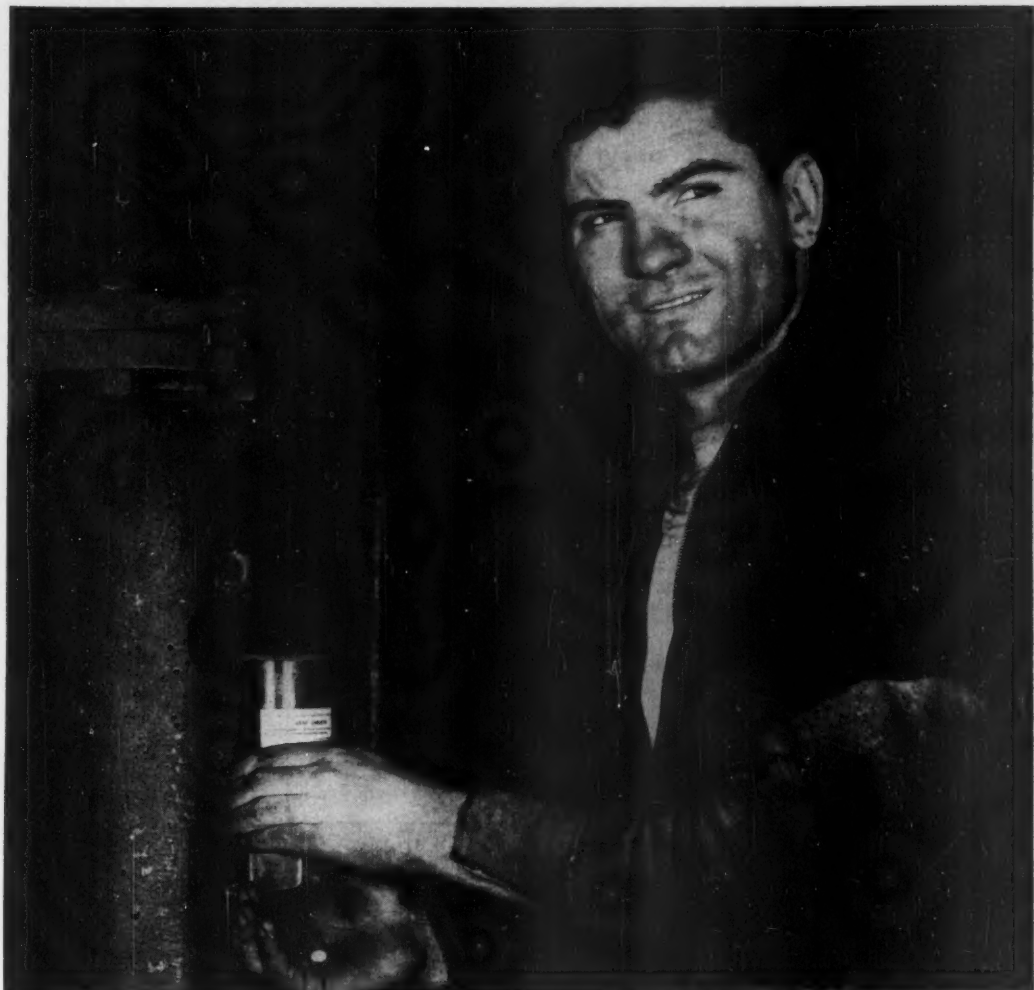
- Authorize the Secretary of the Interior to issue new leases for the next three years.

- Give 37½% of the royalties to the coastal states involved, the balance to go into escrow pending final determination of the row.

In committee, Sen. Russell Long of Louisiana succeeded in getting O'Mahoney's bill amended to (1) give the states supervision, and (2) put 100% of royalties in escrow. O'Mahoney is showing no haste at all in letting the revised version get out of committee.

- **For Schools**—Despite the general run of congressional sentiment toward the States' rights side, federal supporters have been clutching at one small new straw. A dozen senators, including such strong States' righters as Hill and Sparkman of Alabama—have come up with another proposed amendment to the O'Mahoney bill. They would give control to the federal government and divide the 67½% balance of royalties at once among the other 45 states to be used for education.

The idea is that the royalty plum would attract nonoil votes in sufficient quantity to get the bill passed. There's already about \$40-million in the kitty, mostly from California fields.



Hot-Weather Friend of the Steelworker

The white tablet which this steelworker has just taken from the dispenser is a tried-and-true friend to any man whose job involves exposure to heat.

It's the old reliable "heat tablet," composed of common salt and dextrose. The salt in the tablet replaces salt which the body loses through perspiration; the dextrose supplies quick energy. Bethlehem Steel doctors first began providing these tablets for steel-plant employees many years ago. Since then heat cases have become few and far between. There has not been a fatality as a result of heat in any of our steel plants in twenty years.

Supplies of heat tablets, kept always within easy reach of steel-plant em-

ployees, are one proven means of helping to protect health and well-being during summer months. Another big help is the simple, practical information we give employees on how to keep fit in hot weather.

Besides the work of our Medical Staff, our steel-plant management, aided by industrial hygienists and safety engineers, is constantly striving to make Bethlehem plants more comfortable to work in during hot weather. Atmospheres are being purified by removal of dust and fumes. Ventilation is constantly being improved. And with the fully-equipped wash and locker rooms now available at many locations, a man can take a pleasant, restful shower and

change to his street clothes before leaving the plant. All this adds up to better health and better comfort in any season, in summer most of all.

In these ways and in many others, the drag of hot weather on steelmaking is being steadily lessened, and the summer slump in health and efficiency, which once was considered inevitable, has now become virtually a thing of the past.

**BETHLEHEM
STEEL**



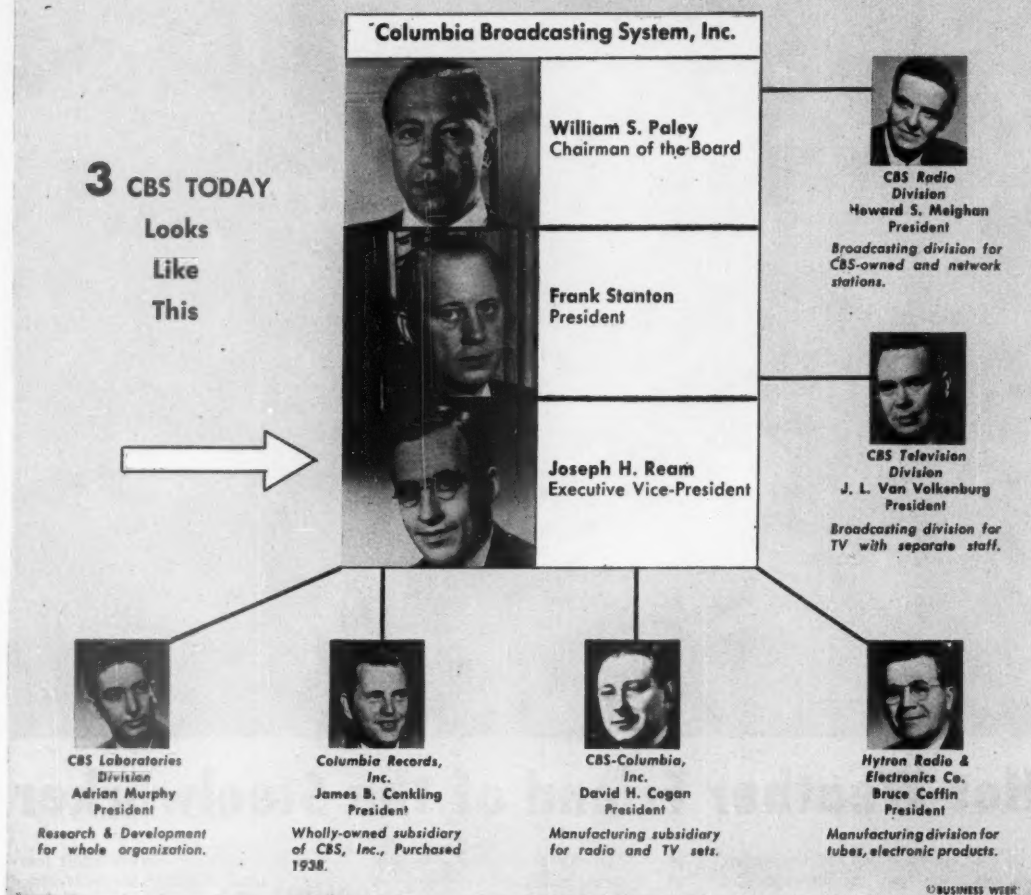
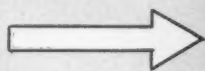
MANAGEMENT

1 CBS grew up in broadcasting. It has topped the field in radio for about 11 of the past 15 years.

2 Now CBS makes its move in manufacturing by purchase of Hytron. That puts new twist to company's organization.

3 CBS TODAY

Looks
Like
This



CBS Redraws Its Organization Chart

Ever since television got so big, broadcasters have puzzled over how to tailor a top management organization to fit the vast new business. The problem is accentuated when, as in the case of Columbia Broadcasting System, Inc., broadcasting spreads into research and manufacturing, too.

• **New Titles**—This week CBS announced its solution. It divided its organization up into four main divisions

and two wholly owned subsidiaries. All of them are headed by presidents (chart). Each will function as an independent unit.

That means that radio and television broadcasting are split for the first time. From now on, they'll fend for themselves with their own staffs—in both programming and advertising.

Still at the top at CBS are board chairman William S. Paley, chief execu-

tive officer, and Frank Stanton, president (cover). No. 3 man is executive vice-president Joseph H. Ream, the CBS legal brain.

On the next level are six presidents, three of whom have come up through CBS management ranks—Adrian Murphy (laboratory), J. L. Van Volkenburg (TV), and Howard S. Meighan (radio). They've been CBS men since the middle thirties. (James Conkling

was brought in as president of the record company in 1951.) The other two presidents are holdovers from CBS' purchase of Hytron Radio & Electronics Corp. (BW—Jun.23'51,p28).

• **The Windup**—This week's management reshuffle puts the finishing touches on CBS' second big move since the end of World War II. Both moves were the result of television's impact. The first one put CBS into an all-out talent and program fight with its chief competitor, NBC. The second pitted it against RCA in the race for color television.

At times, it looked as if CBS might stub its toe in both cases. So far that hasn't happened. This year's color TV victory may mean it never will.

• **The Package Deal**—CBS' first move came in 1946, the year that Paley took over as chairman of the board and gave the president's job to Stanton. Following the shift, CBS expanded its programming department as no other network ever had before and began creating its own package programs. It came up with such top-rated shows as *My Friend Irma*, *Arthur Godfrey's Talent Scouts*, *Our Miss Brooks*, and *Life With Luigi*. CBS wouldn't sell the programs—only the air time. It kept the talent and program as its own property. That's what burned advertisers and agencies. Before, programs were mostly owned by advertisers.

After CBS' pioneering, networks saw they had something to sell besides time. Agencies no longer could suddenly pull a good program off CBS, hand it to NBC, or vice versa.

• **Talent Raid**—Then in 1948, CBS really gave the package program idea a push by taking Jack Benny, Amos 'n Andy, and Bing Crosby away from NBC. It nailed down all of them with long-term employment contracts.

The idea in this first move was two-fold. CBS wanted to develop TV talent and to regain the radio leadership it temporarily had lost. But more important, it wanted to make sure radio audiences wouldn't go over to television by default. If CBS had the best entertainment and showmanship, it could keep a lot of its circulation despite TV.

• **Set Maker**—But the programming campaign was only part of the CBS strategy. Last month, after a couple of near misses, CBS wound up its other big postwar offensive by buying its own manufacturing division, Hytron. Early in September, CBS-Columbia, Inc., will market a color TV set, the first receiver of any kind to carry a Columbia label. CBS-Columbia is now the name for Air King Products, Inc., the set-making subsidiary that CBS got along with Hytron.

The decision to buy Hytron fitted neatly into the postwar pattern. You can't run a broadcasting company today on air alone.

Even in radio anybody who tries to

sell only air-time on an affiliated network is bound to lose money. To make money it takes owned and operated stations plus your own high-grade programs. CBS has the most of both.

In television, it takes all this plus something bigger—plants and facilities to back your engineering knowhow. CBS, for instance, badly needed Hytron so it could move quickly in color TV.

• **A Matched Pair**—Paley and Stanton were a perfectly suited management team to pull off both the programming offensive and the move into manufacturing. Paley engineered the first. The second was Stanton's baby.

To tall, dapper Paley who was a man-about-town in his younger days at CBS, programming has always been a first love. He liked show people, knew most of them, kept a flashy bachelor's penthouse apartment to entertain them. Paley won his first reputation in radio as the discoverer of such talent as Bing Crosby, Kate Smith, the Mills Brothers, Ethel Waters.

The son of a wealthy Philadelphia family, Paley was the good-looking young advertising manager of his family's Congress Cigar Co. (La Palinas) during the early 1920's. He got to know CBS as a sponsor, liked the selling job radio did for his cigars. So he bought into the struggling young network and took it over in 1928 when he was 27.

• **Up on Top**—By 1936 Paley had built CBS to the point where Variety and other trade papers accepted it as the No. 1 network dollarwise.

Since then, CBS has lost the lead only four or five times. It ranked No. 1 in total radio and TV network billings last year (NBC easily topped it in TV, however). On its own, CBS radio set an all-time record of \$70-million in network billings in 1950. This year it was 11% ahead of itself, 32% ahead of NBC in the first quarter.

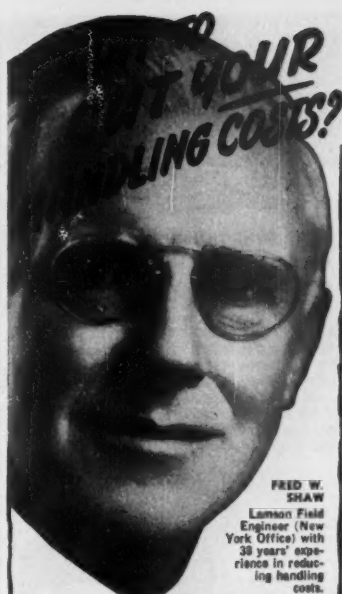
In the 1950-51 season, Nielsen's National Ratings gave CBS 15 of the top 20 evening radio programs; NBC had 4, ABC 1. In the daytime, CBS got 10 out of 10.

To CBS men, this means Paley's plan to build programs to protect the radio audience has worked so far.

• **Stanton's Start**—In addition, it gives Stanton's part of the plan time to get rolling.

Besides his flair for showmanship, Paley has another important knack—getting bright young executives to help him run the business. In 1930 he hired 32-year-old Paul W. Kesten (now retired). He became one of radio's key figures. Victor M. Ratner joined CBS when he was 26. He moved up fast, became one of the top CBS brains before finally ending up as Macy's advertising chief (BW—Mar.3'51,p96).

Stanton was another CBS find. He



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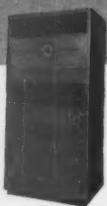
*Companies that have thoroughly checked handling costs find 30% a conservative average. Many run much higher.



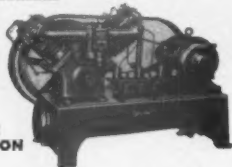
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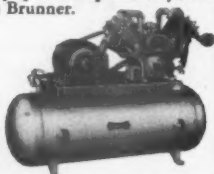


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joined the group in 1935. He was then 27, a quick-minded young Ph.D. from Ohio State University's department of psychology. His training, mixed with his ambition, made him a natural for the fast-moving radio industry. What's more, he knew a lot about it. His Ph.D. thesis was: "A Critique of Present Methods and a New Plan for Studying Radio Listening Behavior."

Stanton still can rattle off figures and facts, sounds like a Ph.D. without looking like one. Out of his college work came the development and use of the first automatic recording device in home radio sets to find out what people listen to.

Kesten hired Stanton for his research staff—at \$55 a week. Stanton went up with Kesten to the top. Along Madison Ave. he is called the "white-haired boy," both for his complexion and for his quick rise to CBS' 20th floor executive offices at 485 Madison Ave.

• **On His Own**—Today Stanton just about runs the show at CBS. Paley sticks pretty close to programming and outside interests. Stanton was the one who worried color TV through the FCC, for instance. But for major decisions Stanton still has to get a nod from Paley.

This year he got the nod on his urge to move into manufacturing. Stanton had been in favor of adding property to CBS ever since he saw how the company was hog-tied in the long-playing record feud with RCA-Victor in 1948-49. Unlike RCA, it couldn't market a radio-phonograph tailored to its own system. It had to depend on others to do it. CBS figures it won the battle, but most think it was a draw.

• **Plans for the Future**—With the management reorganization—another of Stanton's pet projects—he is pretty sure CBS is ready to make good on its moves.

Among his plans is to do to TV set making what the company did to records after it bought Columbia Records, Inc., in 1938. Two years after that happened, CBS cut the price of classical records in half. It put that product into the mass market for the first time, right under RCA-Victor's nose.

The TV project is likely to take more time, but Paley and Stanton are both sure it will work.

Another plan is to get CBS television primed for what most CBS-men think is the age of color—their color. Under Stanton, CBS bought a TV station in Los Angeles, took over another one in Chicago when the American Broadcasting-United Paramount deal was made (BW—Jun.2'51,p20). Added to its original New York TV station, that makes three fully owned. CBS also owns a 45% piece of a Washington station.

Is Bigness Bad?

No, say 90% of the people interviewed in a survey on the public attitude toward big business.

Bigness in business is no sin—especially if the government keeps a rein on the big concern. Of more than 12,000 people interviewed by the University of Michigan's Survey Research Center (BW—Dec.3'50,p57), 90% thought that the good things about big business outweigh the bad. But 71% thought the government should curb its power.

• **Handy Guide**—These findings, and many more, make up a report released last week on a research project that the center undertook on a \$50,000 grant from General Motors Corp.

To management men, the report can be a handy guide for laying out community and public relations policies. Interviewers found out that big business gets most of its public acceptance because of (1) the employment that it creates, (2) its ability to make more things more quickly and cheaply, and (3) its development and improvement of products. Big tax payments and support of education and welfare projects also count in the public eye.

• **Criticisms**—Generally, the research center's findings give big corporations cause for rejoicing. But researchers warn that along with "level-headed" acceptance of the importance of big business go some severe criticisms.

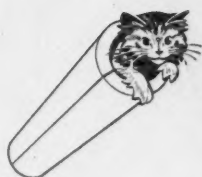
Those who turned thumbs down gave reasons like these: Big business has too much power; it is fumbling on management-labor relations; its profits are too high.

The survey also tried to pin down attitudes on government control, big business influence, and its merits compared to small business. Here are some of the things researchers found out:

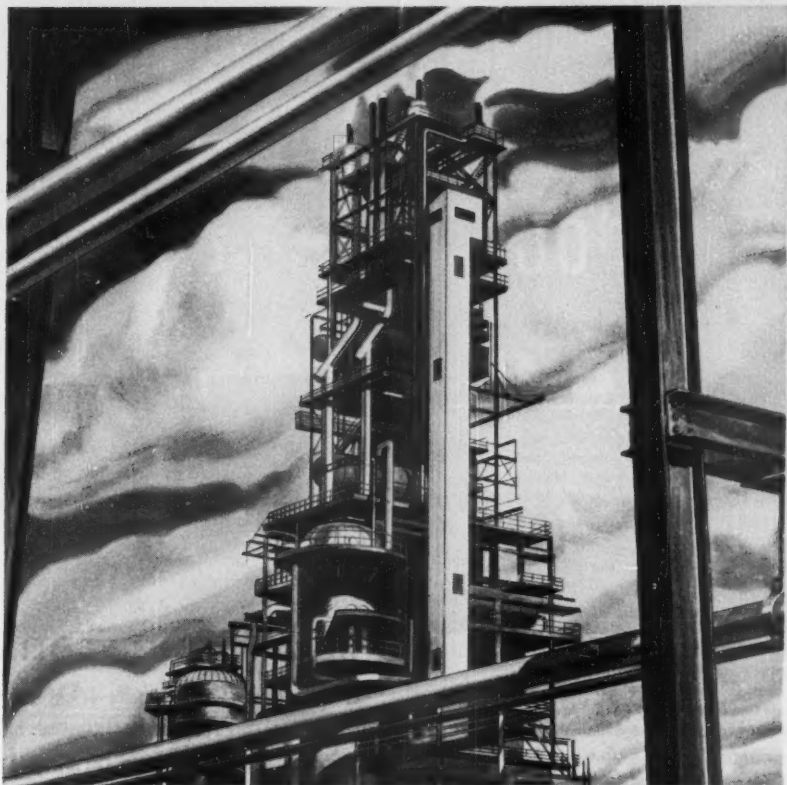
• Of those interviewed, 71% favored some degree of government control to curb big business power over the consumer. Only 18% listed controls as bad.

• In its influence on national affairs, big business comes third in the public mind—topped by Washington and labor unions, in that order. Looking ahead, most figured Washington and state governments would get more influential in the next 20 years, labor and business less.

• Big business stacked up well when compared with small companies. Most of those interviewed thought that it is more efficient than small business, pays better, that its jobs are more secure.



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Kaylo calcium silicate was introduced in 1943 by Owens-Illinois after many years of research. Heat insulation is only one form in which Kaylo material is serving industry better. It has demonstrated superiority for numerous building uses as well.



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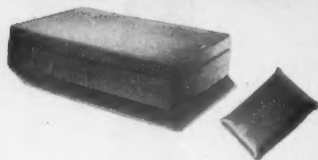
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Early in the development of foam rubber products, MHS engineers were called in by one of the largest rubber manufacturers to assist in the design of equipment to produce foam rubber products in large volume.

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Fifteen years of continuous effort have been devoted to this project and what has been accomplished is today the recognized pattern for good practice throughout the whole industry. It is also typical of what is being done by MHS engineers in other industries.

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Profits Without Fanfare

Once again, Cleveland's Jack & Heintz is riding high. But there is no razzle-dazzle under the new management—just efficient production with a watchful eye on costs and markets.

Jack & Heintz, Inc.—the Cleveland war-sprout that withered soon after World War II—is back on the scene—this time as a prosperous, established business. In the process, it has dropped all the hoopla that made Bill Jack famous and drove other Cleveland employers wild.

It took four years, a couple of managements, and \$8-million in losses from 1946 to 1950 to do it. But now that the company is back among the city's industrial leaders, the payoff seems worth all the trouble. In 1950 J&H netted \$1.7-million. This year profits ought to be even better.

• **No Similarity**—Many a Cleveland manufacturer still bristles when he mentions Bill Jack's name, but he doesn't mean Jack & Heintz, Inc., vintage 1951. What he is talking about is the razzle-dazzle operation Bill Jack and Ralph Heintz started when they came out of California in 1940 (BW-Mar. 7 '42, p. 72). And there's a vast difference between the two.

From 36 employees in 1940, Jahco—a name plugged by Jack but frowned on by present management—mushroomed to 9,000 workers with a \$100-million volume at the peak in 1944. It got smashing headlines for production wizardry. But among Cleveland

employers Jack is remembered more for his ultra-liberal labor policies that pirated thousands of workers from other companies in the area. Jahco recruited and held its "associates"—Jack never called them workers—with free shoes, trips to Florida, whopping bonuses, Christmas turkeys. The five-year tab: \$11-million in employee handouts.

• **In the Red**—In March, 1946, Jack and his partner sold out to a New York group headed by Byron C. Foy, former Chrysler executive. Besides the name, Foy and associates bought themselves a fistful of orders. But they also bought a major headache in filling them at prices Jack had set. It couldn't be done—not with a profit. Under Foy, J&H never got out of the woods.

• **To the Rescue**—In September, 1948, Robert Heller & Associates, management engineers, were called to the rescue by big stockholders (BW-Sep. 25 '48, p. 89). Two years later, F. R. Kohnstamm, a vice-president since 1947, was picked as president at Heller's recommendation. He had been one J&H man who seemed to have some answers when Heller took over.

Heller had found plenty wrong at J&H. Practically all its funds were tied up in unbalanced inventories. It was top-heavy with plant equipment, and

are you spending \$5664 TO DO A \$1417 JOB?



A Chicago plant* was! Oil consumption for their 5 high speed machines ran to \$5664 a year . . . yet machine break-downs and bearing replacements were frequent . . . stock spoilage and rejects were high—until they made an important 30 day lubrication test.

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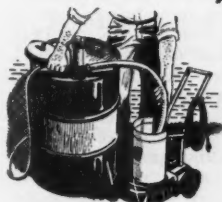
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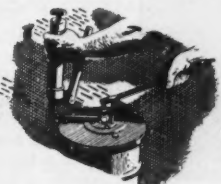
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organization left over from the war boom. Its engineering, sales, and distribution were going off at tangents.

• **Some Changes Made**—Using the Heller studies and some ideas of his own, Kohnstamm has changed all that. Management has been streamlined; heads have fallen. Kohnstamm works smoothly with a board of directors that includes Robert Weaver, chairman of Ferro Enamel Corp.; Archie T. Colwell, a Thompson Products, Inc., vice-president, and George Merryweather, big machine tool builder. All represent Cleveland outfits, with ideas far removed from those of Bill Jack.

Production has been stripped down to the one big Maple Heights plant. Four others of Bill Jack's World War II plants have been lopped off at a saving of \$115,000 a month.

Products now total 100, with 50 more under development. Included are small powerful starters for the Patton tank and electrical control systems for bombers and commercial planes. Fractional motors now are made for special application, one of the new merchandising approaches that ties in with production and engineering. Last year that part of J&H did a neat \$2-million business.

Engineering is under Dwain Fritz who took Heintz' place. His department also has come up with motors that run submerged in oil or gasoline plus new hydraulic and electrical actuators.

Employee relations are still good. But the lush days of 1940-45 are gone with Jack. The present force of 2,500 still gets free lunch and coffee twice a shift, has company-paid hospital and insurance benefits. But there is no maseur, no mechanic to keep employees' cars in condition—all for free.

• **Sound Future**—All this has convinced even Clevelanders that J&H is here to stay. Sales are about \$2-million a month, arrearages on the 21,892 shares of preferred stock have been cut from \$7.50 a share to \$1.50 since December, 1950. In that year, volume amounted to \$13-million, 32% above 1949. Since then the order backlog has grown from \$18-million at the beginning of 1951 to well over \$40-million today.

Naturally, a lot of this is war business, just as in the fabulous days of Bill Jack. But even before Korea, J&H turned in a profit of more than \$700,000 for the first six months of 1950.

• **Conservative**—On top of that, the present conservative management plans no mushroom growth to meet demand. Instead it has enlisted 63 subcontractors to help turn out its orders. J&H will operate a formerly owned plant under an Air Materiel Command-Navy contract, but it is leasing the space. And the government will provide the machine tools and equipment.

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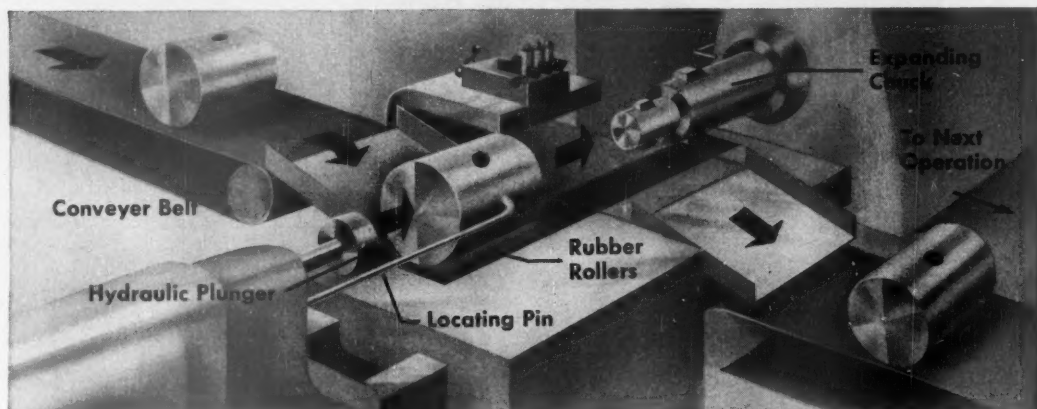
PICK In today's factory the operator first has to pick up the part.



PUT Then he has to position it in his machine and turn the switch.



TAKE Finally he turns the machine off and removes the finished part.



NO HANDS In the factory of tomorrow, the part will roll to the machine on a conveyer belt. A bed of rollers will position it. A ram (left) will engage it with the chuck (right). After it is machined, a belt carries it way.

How a Robot Factory Would Work

The modern oil refinery is a pretty clever contraption. It's the nearest thing to an automatic factory in industry today.

With only seven men supervising, the average refinery can turn out 300,000 bbl. of gasoline a day. Into one end of the plant go distillates of crude oil. A unit called a catalytic cracker shuffles their chemistry. And the finished products come out at the other end.

• **Manufacturing Next**—The next thing engineers want to do is apply the refinery techniques to unit manufacturing—to production of such things as bearings, pistons, parts of machinery.

It will take them years to do it. But you can get an idea of what is ahead from a special study by a group of Harvard Business School graduates, headed

by John T. Diebold. Their report, *Making the Automatic Factory a Reality*, surveys the technology now available to industry.

According to the Harvard group, three big obstacles stand in the way of transferring automatic methods from the process industries to unit manufacturing:

- There is still too much manual handling of a product.
- Machines aren't flexible enough to do a bundle of functions within a reasonable range.
- Some products aren't easily adapted to automatic production because of their design.

• **Built-In Controls**—To understand the problems involved, go back to the oil refinery, and take a look at what is hap-

pening when it is on stream. The thing that makes it automatic is the system of instruments built into it.

Say the temperature of the fluids and gases in a certain unit suddenly shoots above normal. The instrument that watches over this unit will sense the temperature rise, compare the change to the normal condition, then correct the controls to send the temperature down again. While all this is happening automatically, the operator in the refinery control room gets a record chart of what is going on.

Other instruments meanwhile check pressures, quantities, rates of flow. All are adjusted to work as a team turning out a prescribed product.

But an oil refinery is dealing with a continuous flow of a homogeneous sub-

stance through its pipes. Unit manufacturing deals with separate parts. The problem is to apply the built-in control idea to the flow of separate units.

I. Anatomy of a Robot

The Harvard group tackled the practical side of this problem by working out the requirements of a hypothetical factory to make pistons. It drew up a layout consisting of a series of machines than can make a variety of similar parts within limited size variations. The machines are linked by automatic products-handling devices (see drawings, page 56).

• **The Dream**—In theory, one human operator could dump a load of rough-finished pistons onto the conveyer going to the first machine. After pushing the starting button, he could run around to the back door of the plant and wait for the finished pistons to come rolling out.

If the demand for pistons should drop, the operator could adjust the machines and soon have the factory turning out, say, bearing rings for gas turbines.

• **No Brains**—Despite its automatic processes, the Harvard group's dream plant still isn't a robot factory, one that can change itself over from one product to another without interrupting its output—and take time out for the Fourth of July. What the plant needs for that is a thinking machine such as a digital or analog computer.

An electronic or mechanical brain would tell the machines to turn out so many gross of pistons and so many bearings after that. Then the machines and conveyers would have to adjust themselves automatically.

II. Eliminating Handling

As production stands today, the idea of a factory run by a digital computer—a factory that does its own thinking—is pretty much of a pipe dream. Before you can talk of anything like that, you have to wrestle out the more immediate problems of product flow, machine design, and product design.

The biggest hurdle of all—according to the Harvard group—is product handling.

Before a machine can do its job, it must be loaded and unloaded with parts or products. Usually this is performed by a human operator, who stands in the way of making the machine truly automatic. In the automatic factory he must be replaced by a mechanical handling device that will load and unload the product at the machine.

• **Duplication or Imitation?**—In engineering a product-handling device, the problem is to duplicate the function of the human operator. In a loading device for the Harvard group's auto-



HELPING HIM TO HEAR 10 FATHOMS DOWN

Divers at work many feet below the ocean's surface often stake their very lives on the special telephone equipment that enables them to talk instantly with deck crews above.

That's why a diving equipment manufacturer was in a tough spot! He'd received a rush order for this vital communication apparatus—but his usual supplier of special telephone parts said he couldn't deliver for 2 to 3 months.

At this point, the worried manufacturer contacted Graybar, and a Telephone Specialist tackled the problem. It was found that, with a few modifications, telephone apparatus already in local stock could be adapted.

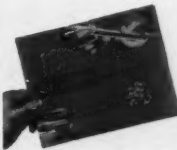
Once Graybar showed that the changes meant no sacrifice of safety, the modifications were allowed, and the diving equipment builder made his shipment on time.

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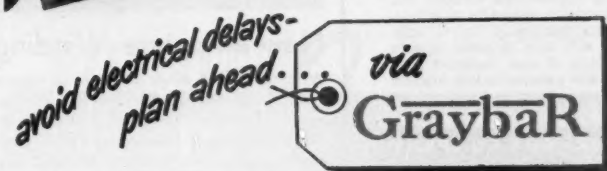
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matic chucking machine (page 56), the product is made to move in two directions.

For the chucking machine, it is the group's idea to bring the rough-finished piston up to the machine on a conveyor belt. It is then pushed into place by an hydraulic arm and positioned on the holding chuck of the machine. After it is machined, the piston, ejected by the holding chuck, drops to another conveyor for transfer to the next machine.

• **Set in Its Ways**—The products handling used in, say, the bottling machine is the last word in engineering. But it is specialized for a certain type of container. Changing the container's shape for the sake of consumer acceptance would call for extensive changes in the equipment, although the handling components are rather cheap compared to the bottling equipment itself.

III. Flexible Machines

Next to product handling, the biggest problem is to design machines that can do complicated jobs without direct supervision. And the hitch here is that the machines must not be so specialized that they can't shift to different kinds of work.

Machines that do complicated jobs

economically and automatically are already old hat. Examples:

• **Pratt & Whitney Aircraft Division of United Aircraft Corp.** has a jig boring machine making master turbine blades that operates from an electronic blueprint reader, a development of General Electric.

• For small runs of a product, GE has another control device, an advanced version of a tape recorder, that operates a machine tool by feeding three different commands simultaneously into the tool.

• **Arma Corp.** also has an analog computer that carries its commands in the form of punches on a roll of paper.

• **Brown Instrument Division of Minneapolis-Honeywell** has designed controls for dairy and bottling equipment that take the milk from cow to bottle with very little human aid. Bottling machinery for milk or soft drinks is the nearest thing to the robot plant in unit production, as opposed to the bulk-form processing carried on by chemical and petroleum industries.

• **Specialists**—The borer that reads blueprints and the bottling equipment do perform many individual steps automatically. But neither is designed to meet the Harvard group's requirements for robot production. Being specialized, these machines can't be mass-



New Armature Winding for Auto Generators

A machine that winds 28 coils of copper wire simultaneously for automotive generator armatures has been developed by Lewis Welding & Engineering Corp. Normally armatures are wound only one or two coils at a time. The new type of winding,

Lewis says, allows the generator to operate at temperatures at least 10C cooler at full load than the former design. Electrically timed solenoid valves operate the machine. Four of Lewis' armature winding machines are on the way to Ford Motor Co.

produced. And again, being specialized, they are strictly one-product machines. To be economical, they must turn out large batches of the product to justify their initial cost. And it would take too much money to refit them for some other product.

The answer, as the Harvard group sees it, is a machine that is flexible enough to perform a range of similar operations within practical limits. One that would turn out watch wheels and engine gears, of course, is practically impossible. But an automatic chucking machine, like that used by the group in its hypothetical factory, can machine not only automotive pistons, but bearing rings for a gas turbine as well.

IV. Tailoring the Product

Aiming for an automatic factory makes sense, of course, only when the process that makes the product can be mechanized. Though machines and handling devices have been developed individually for automatic operation, they might not combine for technical reasons to form the robot plant. The steel industry, for example, uses a bewildering variety of controls; yet, except for continuous casting, it is still far from having a complete process that can be called automatically controlled.

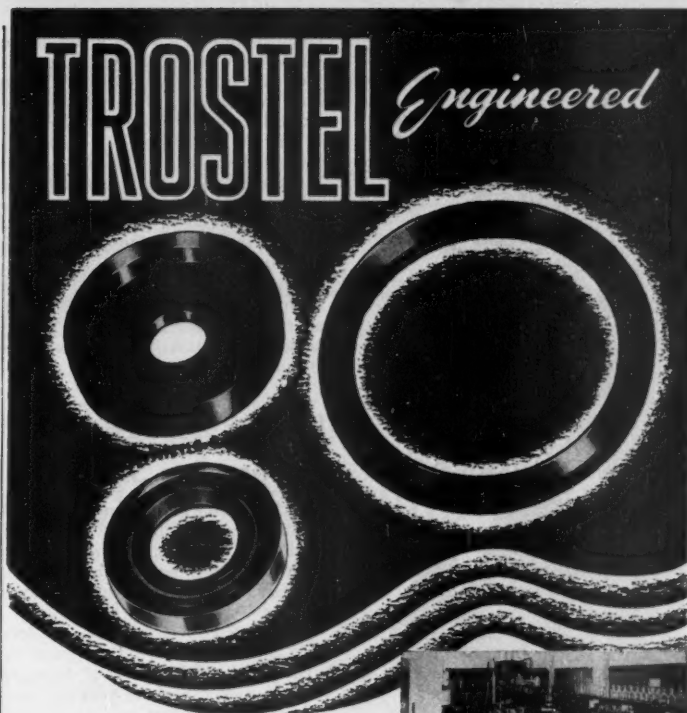
• **Redesign**—If the process can't be completely mechanized, then its product might be modified. Some other product, made by a process more suited to automatic control, might perform the functions that the customer expects of the original one. Perhaps a simple redesign of the product is all that's needed to build an automatic factory around it.

In the group's own automatic factory, for example, the rough-finished piston has two reference points in the head of the piston that makes it possible to position the piston on the chucking machine automatically. But the same automatic positioning might be impossible if the piston had a different shape or design.

V. Some Day

If one way or another, you get a machine and handling setup adapted to automatic operation, then theoretically there is no reason you can't hook it up to a digital computer to control the whole works. Right now the custom-built computer is too expensive for wide use in industry. And its ability to think in micro-seconds is even a little too fast for most production applications, which usually require decisions in only tenths of a second. So industry needs a scaled-down mechanical brain—a sort of half-wit version—for the automatic factory.

The industrial version of the brain



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MAKERS OF DOT FASTENERS

could coordinate a whole group of production and assembly lines. The variables in production that are now handled by human beings could be automatically taken over by the computer.

But the big headache of such a system would be building a memory into the computer so that changes in production would make sense to it. A computer can only make choices between a series of two alternatives, going from one step to the next.

The chief problem of applying the computer industrially is that of listing all the many alternatives to a particular set of conditions for each production step in the factory.

Brushes Replace Acid In Descaling Steel

Pickling isn't limited only to alcohols and gherkins. The steel industry has used it for a long time to remove scale from steel strip by running the strip through a vat of sulfuric acid or sodium hydride.

Last week Osborn Mfg. Co. of Cleveland announced that it has worked out a completely different way of doing the job. It uses a bank of rotating steel-bristled brushes that rub against the steel strip and clean away the scale as the strip passes by.

The method hasn't yet been installed in a commercial application. So right now it's hard to make estimates of cost savings compared to conventional pickling. Osborn's management will only say that the idea has been tested enough to show that its chances of success are excellent. Tests indicate that the cleaning action of the brushes is effective enough for most mill requirements. It can handle strip speeds of 200 to 500 ft. per min. and higher.

• **Advantages**—Metallurgically, Osborn's method offers several advantages over chemical pickling.

- When steel strip comes in contact with pickling acid, it absorbs gases that can hamper enameling and painting later on if the gases are not completely removed. Because there is no chemical reaction, the Osborn process eliminates this contamination of the steel.

- While they are doing the descaling, the rotating brushes also remove burrs along the edges of the strip. These rough edges sometimes cause steel to crack during subsequent rolling.

- After the steel is cleaned by brushes, the scale that's left over is worth its weight in powdered iron. With pickling there's no recovery of the scale. Every year acid wastes containing tons of chemically changed steel go down the drain.

- Usually the drain empties into a

nearby river, arousing a cry for a waste-disposal setup to control pollution. That can be expensive. The Osborn descaler has no waste chemicals to fool with.

PRODUCTION BRIEFS

Rolls-Royce of England studies stresses and strains on jet engines in flight by putting electric gauges inside the blades of a jet-turbine engine and connecting them to a radio transmitter. Conditions of the blades are detected by the gauges and broadcast to a recording device on the ground.

The coke-producing plant of Niagara Mohawk Power Corp. has been bought by Republic Steel Corp. for its Troy (N. Y.) blast furnace. Niagara Mohawk used the plant as a source of manufactured gas, is now switching to natural gas.

Motor oils and plastics will be two of the markets for an isocetyl alcohol plant of 5,000-ton annual capacity that is being planned by Standard Oil Co. (Ind.) for its Wood River (Ill.) refinery.

Multistory apartment buildings will be studied by the Illinois Institute of Technology for the Chicago Housing Authority. The immediate aim is to develop construction methods that will conserve manpower and critical materials. In the long run, it will help the building industry to turn out cheaper apartment houses for low-income families.

The transistor, a tiny substitute for electronic tubes (BW—Apr. 8 '50, p63), has been given a few refinements at Bell Telephone Laboratories. The latest one is about the size of a pea, uses a speck of germanium that has an electrically positive layer sandwiched between two negative ends. Possible application: complex switching mechanisms of dial systems where electronic tubes are impractical.

A **bonding agent**, worked out by General Electric Co., joins silicone rubber to steel, glass, ceramics, and some non-ferrous metals. This will increase the usefulness of the rubber where a combination of structural strength and shock-resistance is needed.

Mica for electrical insulation will be made by a process developed in France that eliminates laborious hand operations. Domestic scrap and previously unusable Muscovite mica can be used by the process, according to the newly formed Samica Corp.

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Shipper Satisfaction

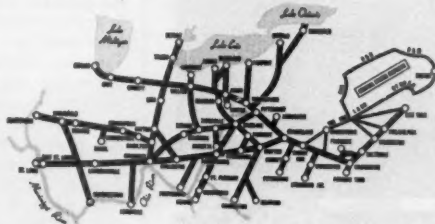


Shippers who use the Baltimore & Ohio are enthusiastic about its care in handling and accurate scheduling. But what pleases them most is the *personalized* service they receive—the friendliness, the suggestions, and the extra efforts in solving special problems.

B&O freight operations such as Sentinel Service on carload freight, and Time-Saver Service on less-than-carload, work smoothly because of the personal interest taken by B&O people.

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Your stock of strip becomes more flexible—goes farther—when mill-widths can in a few hours be slit to the desired widths, in your own shop. Many fabricators have reduced inventories from 40 to 60% by investing in a Yoder slitter.

Production planning becomes easier, too, when expected and unexpected needs for any width can be so quickly and easily met.

Direct savings alone may range from \$5.00 to \$50.00 per ton, depending on widths, quantities and other factors. On requirements as low as 1000 tons per year, a Yoder slitter therefore usually becomes a highly profitable production tool. Get the facts! Send for 78-page book on the economics as well as the mechanics of doing your own slitting.

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Titanic Titanium

New metal has vast potential if cheap production method pans out. But fabrication woes may delay its spread.

Horizons Titanium Corp. is looking out at some very broad horizons. A 100-million-lb.-a-year market for titanium, for instance—the sober guess of a government authority.

Prospects for that sort of military and commercial demand hang on the big-scale production success of Horizons' new process for making titanium (BW-Jul.7'51,p.20). So far, the Horizons process is in the test tube stage. But the company is betting that it will be able to bring the cost of titanium down to \$1 a lb., from the present cost of \$5 a lb. for sponge and \$7 a lb. for ingot.

Titanium enthusiasts see almost no limits to the expansion, if the price can be chopped down. They point to the case of aluminum, which conquered enormous markets as soon as the price was right.

• **Fabrication**—Of course, no new metal comes into mass use overnight. Once it's established that it has the desired properties, you have to lick the problems of extraction. That's what Horizons believes it is doing now. But success there is not the end; you also have to learn how to fabricate the metal. That knowledge comes from experience alone. And in the case of titanium it promises to be a long job, for the metal is hard to work.

The virtue of titanium lies in its combination of three properties—strength, light weight, and corrosion resistance. It's about twice as heavy as aluminum and four times as strong, less than half the weight of stainless steel and almost as strong. In certain places, like salt water atmospheres, titanium will resist corrosion better than aluminum or stainless steel.

• **Pots and Pans**—Some enthusiasts feel that low-priced titanium could crack the pots-and-pans market. Although it is heavier than aluminum, thinner sections could be used because it's stronger. Titanium might move in even faster in places like railroad car structural parts, auto bright work and trim, and chemical processing equipment like valves and piping.

Unlike private industry, government goes ahead on a cost-doesn't-matter basis when it feels that a material is vital. That's why it's using titanium even at present prices, in relatively small quantities for research and prototypes. If titanium's price should drop from \$5 to \$1 per lb., the services would rush to

put it to work in lots of places where it is desirable, but not wholly essential. Here are some of these military jobs for \$1 titanium:

Aircraft: There are many promising uses in jet and gas turbine engines. Titanium has withstood tests in firewalls, shrouds, baffles, and diaphragms, where its big advantage over stainless steel is in weight saving. A 0.015-in. thick sheet of stainless weighs 0.60 lb. per sq. in.; a titanium sheet of the same thickness weighs only 0.35 lb. per sq. in. Titanium alloys might also stand up in blades for jet engines, provided they aren't subjected to excessively high temperatures. Using titanium instead of stainless steel might lighten a jet engine by as much as 300 lb. That's equivalent to about 50 gal. of fuel.

Naval uses: Titanium's resistance to salt water corrosion makes it a natural for shipboard use; the Navy is hot about Horizons' Titanium's new process. Brine has been known to attack stainless steel in certain cases; titanium can stand the gaff. A few parts that the Navy would like to make of titanium are: snorkel tubes for submarines, valve seats, heat exchangers, condenser piping systems, pump shafts, small propellers and propeller shafts, and steam turbine blading.

Ordnance: Army Ordnance wants to use titanium in applications involving manual handling because of its lightness. A case in point is the 81-mm. mortar base plate, where it has been shown that titanium can be used instead of steel. Made of titanium, the plate can be of one-piece construction weighing about 24 lb. The standard steel plate is made in two pieces, each weighing 24 lb. and each carried by one man. The rest of the weapon is carried by a third man. With the titanium plate, the mortar can be handled by a two-man crew.

• **Armor Plate**—Col. Benjamin S. Messick, chief, Reserve and Materials Branch, Army Ordnance Research and Development Division, recently said that titanium alloy may possibly be substituted "thickness for thickness for alloy steel armor, reducing armor weight by about 40%."

• **Hard to Work**—Actually, reducing the cost of titanium is only a part of the problem. Right now the material isn't too easy to work. It's tough to machine and is rough on grinding wheels. But there shouldn't be too much trouble in welding, forging, or extruding titanium. In rolling sheet and strip, the material will have to be hot-worked, probably followed by a cold finishing operation.

Present fabricating experience with titanium is limited. But specialists say that when more is learned about its characteristics it should be comparable to stainless steel in workability.

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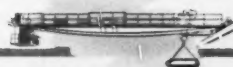
HOMES



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WELDING EQUIPMENT



OVERHEAD CRANES



SOIL STABILIZERS

The money
he needed
moved around
with him



AN EMPLOYEE of an automobile sales and service agency in Buffalo, New York, tried to keep on working although he was not in good health.

He finally broke down and was taken from his home in Buffalo to a Veterans Hospital in another town. Following hospitalization, he convalesced at a relative's home in Ohio.

The man was insured for weekly sickness benefits under a Group Insurance Plan set up and administered for his employer by The Travelers. Travelers Claim men at the three locations followed his progress. And the money he needed so much during his illness was paid to him every week on the dot—at home, at the hospital, and at his relative's.

As this case illustrates, sick or injured employees are not always in easy reach of your office. Sometimes they must travel about. Often employees are far from home when misfortune strikes.

But if they are insured with The Travelers, claims under your benefit plan can be checked thoroughly and then *paid promptly*—no matter where your employees happen to be.

For The Travelers maintains 203 claim offices—many more than are maintained by any other company writing Group Insurance. Each of these offices is fully staffed with Travelers Claim men.

In fact, over 2000 people in The Travelers devote their full time to Claim work, and *ninety per cent of them are located in the field.*

Let your Travelers agent or broker tell you more about Travelers Personalized Claim Service and how it can increase the value of your benefit plan—to you and your employees.

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NEW PRODUCTS



Two-Way Car Portable

There's always room for another gadget to plug into the cigarette lighter socket in your car. Northeastern Development Engineers, Inc., found the socket is a good spot to plug in a two-way radio it has designed.

The 12-in. x 8-in. x 8-in. radio is portable, has a 20-mi. range, and will operate in any car—even when it's moving. You clamp its portable antenna to a slightly lowered window, then plug the rubber cord into the lighter socket. The set, which sits on the front seat beside the driver, operates on a.c. or d.c., draws 14 amperes.

Northeastern thinks the two-way radios will be particularly useful for civil defense, small fire and police departments, and newspaper reporters.

• Source: Northeastern Development Engineers, Inc., 21 Lewis St., Pawtucket, R. I.

• Price: \$318.50.

Four-in-One Transformer

A tricky design problem for engineers is that of the core—or layer of laminated iron plates—of an electrical transformer. Increase the size of the transformer, and the laminated core tends to lose its electrical efficiency. The problem is especially troublesome in large transformers used for welding. Yoder Co. makes a welder transformer that, it says, solves the difficulty.

The Yoder welder is based on the theory that four small transformers are better than one large one. By using four windings instead of one, Yoder keeps the core smaller, improves the operating characteristics of the transformer. A Yoder transformer with a 200 (kva) capacity is reported to operate



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Why the RABBIT'S FOOT in the make-up box?



The old superstition that a rabbit's foot brings good luck resulted from the belief that rabbits were born with their eyes open, and thus had the power to ward off misfortune.

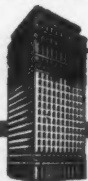
But you'll need more than a rabbit's foot when an accident happens and you are held liable! Complete protection for you and members of your family residing with you for all accidents (other than automobile) is provided by our Comprehensive Personal Liability Policy. Costs are low—for instance, only \$10 buys \$10,000 protection for each occurrence . . . anywhere! Don't trust to luck—call our agent in your community today.

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as efficiently as a 50-kva conventional transformer. That means lower power costs.

- Source: Yoder Co., Cleveland, Ohio.
- Price: About \$150,000 for complete welding unit.



Sweeper for Lift Trucks

A lift truck attachment called Yard Bird should take the dirty work out of cleanup jobs in plants, warehouses, and terminals. Manufacturer Little Giant Products, Inc., says a lift truck operator with no special experience can clean up to 80,000 sq. ft. an hour using the powered sweeper.

You attach the sweeper to the truck in a matter of minutes—without the use of tools. The sweeper connects by means of eyebolts, clamping bars, and wing nuts.

The sweeper's 6.8-hp. gasoline engine turns at 2,400 rpm., but a clutch reduction unit slows brush revolutions to 164 rpm. As the truck moves the sweeper, the revolving brush whisks dirt into a full-width, floating dust pan that's easily dumped. Flying dust is controlled by a spraying system, which comes complete with a 30-gal. water tank.

Little Giant says that the unit also does a fast snow-clearing job if you hook it up at an angle to the forks. Yard Bird fits any lift truck with a capacity of 1,500 lb. or over.

- Source: Little Giant Products, Inc., 1530 N. Adams St., Peoria, Ill.
- Price: \$975.

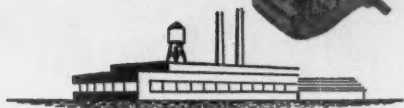
It Mixes—With Safety

Homogenizing the milk you drink makes it easier to digest. But there's a possible danger of the product's being contaminated by the driving mechanism in the process. That's why Scott & Williams, Inc., now builds a pump unit with hermetically sealed chambers that it says are a lot safer than standard sealing by gaskets and stuffing boxes. Called Hydro-pulse, the unit processes materials such



55 72

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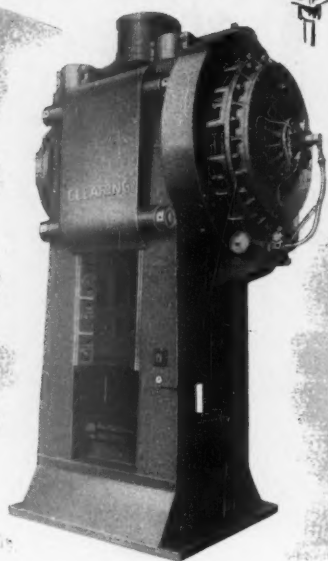
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as food products, oil emulsions, cosmetics, and pharmaceuticals.

One kind of pump uses a piston that slides in and out of a cylinder that acts as the pumping chamber. But Scott & Williams' pump has one refinement: A synthetic rubber sheath over a cylindrical support, which forms the head of the cylinder, expands and contracts as the piston moves back and forth in the cylinder. The rubber sheath not only moves the fluid but isolates it in the pumping chamber from the mechanism of the pump. That way the fluid neither infiltrates the mechanism nor is contaminated by it.

Hermetic sealing makes it possible to operate the unit as a high-pressure pump in dangerous atmospheres, as in pumping volatile liquids such as gasoline. Hydropulse can also handle abrasive liquids, such as the mud used in oil-well drilling, because the material can't wear down the pumping mechanism. The unit comes in four sizes, ranging from 1-gal. to 24-gal. per min. capacity, for pressures up to 4,000 psi.

• Source: Scott & Williams, Inc., 350 Fifth Ave., New York City.

• Price: \$999-\$1,995.

NEW PRODUCTS BRIEFS

Easy dumping by a fork-lift truck is an advantage of a materials handling box called Phil-Box. Guide holes for the fork prongs and a special lock keep the box from slipping off when you invert it on the truck's revolving apron, says manufacturer Phillips Mine & Mill Supply Co., 2331 Jane St., Pittsburgh, Pa.

Midget control units for power and industrial process plants are available from Bailey Meter Co., 1050 Ivanhoe Rd., Cleveland, Ohio. Mini-Line instruments, automatic or manual, for running boilers, turbines, and process units take from 52% to 87% less space, can be mounted on centralized control panels.

Allen Ground Alarm tells you instantly when an electric line is grounded. It adjusts to any resistance from 0 up to 8,000 ohms, requires no maintenance, according to distributor Excel Electric Service Co., 2121 S. Western Ave., Chicago. Signaling devices may be bells, horns, or lights. Price: \$148.

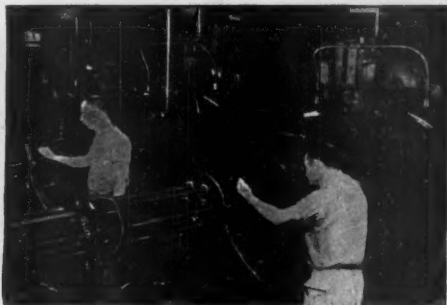
Maximum power with minimum space and weight is the aim of Hertner Electric Co., 12690 Elmwood Ave., Cleveland, in building bantam a.c. electric motors. The basic motors, for operation at 400 cycles or higher, have a rating of about 1 hp. They can be used for aircraft and other special jobs.

ELASTIC STOP-NUT CORPORATION:

"We're Stronger Than Ever for Tri-Clad Triple Protection"



FRED A. HOFMANN, production vice president of the Elastic Stop-Nut Corporation of America, says, "Today, every one of the 62 Tri-Clad* motors we've installed since 1941 in our plant at Union, N. J. is going night and day. Sure, we make a lot of steel products. But for a general-purpose motor, we don't think you can beat cast iron. After the pounding we've given our Tri-Clad motors for the past ten years, we're stronger than ever for Tri-Clads."



4 STEPS—AND NO HANDS! Backbone of the ESNA production line, the Acme Gridley automatic bar machine ejects a finished nut blank every $4\frac{1}{4}$ seconds. The load on the 10-hp drive motor is heavy and constant—but Tri-Clad*, with its bearings completely enclosed in cast-iron housings, can take it! Maintenance department can't recall a single Tri-Clad bearing ever having to be replaced.

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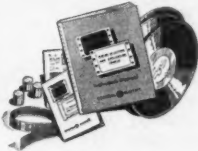
TROUBLE SHOOTER TESTIFIES. Ed Conk, ESNA's maintenance chief says, "We like a motor you can regrease easily if you have to. So far, we've had to regrease very few of our Tri-Clad motors. And those were either on hot spots or on particularly tough jobs. The point is—we could readily have regreased them all if it was necessary."

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REGIONAL REPORT



Federal Reserve District	May 1951	April 1951	May 1950	Federal Reserve District	May 1951	April 1951	May 1950
1. Boston	229.0	226.4	190.4	8. St. Louis	270.5	265.3	232.3
2. New York	244.1	244.7	205.1	9. Minneapolis	292.1	293.6	246.5
3. Philadelphia	246.4	248.5	211.9	10. Kansas City	322.6	325.5	263.6
4. Cleveland	263.9	262.2	221.7	11. Dallas	350.7	352.0	292.1
5. Richmond	281.0	275.0	232.9	12. San Francisco	300.4	298.6	258.4
6. Atlanta	307.8	309.9	263.4	U.S. Composite	273.3	272.8	230.2
7. Chicago	272.3	273.2	228.0				

1941=100; adjusted for seasonal
May figures preliminary; April revised

Slow Uptrend in Income Continues

Income rose again in May, but the rise was the smallest since February. The composite of BUSINESS WEEK's Regional Income Indexes advanced only 0.2%, from 272.8% of the 1941 average to 273.3%.

This continues the pattern of small monthly gains that has been evident since the beginning of 1951; it is in sharp contrast to the fairly substantial gains that were registered each month through the last half of 1950. Between June, 1950, and January, 1951, the composite rose 13½%, almost 2% a month. From January to May the rise

was only 2.4%, or 0.6% a month.

Prospects are for a continuing rise in income for the indefinite future. The tempo should pick up, too, particularly in the industrial regions, but the timing of that move is still anybody's guess.

The prospects for the nation's farmers for the rest of this year are spotty. Weather has been the controlling factor so far: Regions where the weather has been favorable have good income prospects; in regions where it has been bad, the outlook is also bad.

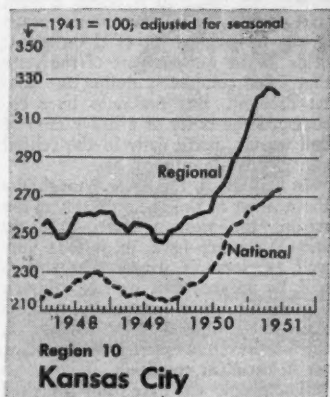
Best over-all prospects are in the northeastern and east north central

states and on the Pacific Coast. One of the areas worst hit by the weather is the wheat country centered around eastern Kansas (page 73).

Two problem areas are the corn belt and the cotton belt. Corn was planted very late, and its development has been slow. If all goes well from now on, and if the frost doesn't come too early, there will be a big crop. But conditions this year are much like 1947's, when a mid-summer drought and an early frost resulted in the poorest corn crop in years.

The South and Southwest have a big cotton crop started—enough to top the

government goal of 16-million bales by a comfortable margin. So everything depends on what breaks they get on weather and weevils in the next three months.



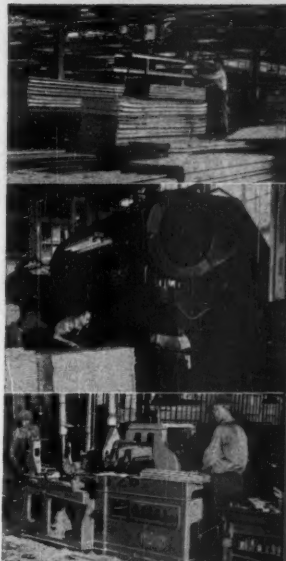
Biggest news by far in this region is the weather. Within the past nine months the nation's wheat bin has had wide extremes of weather—almost all of it bad.

First blow was the six-month drought of last fall and winter, which played hob with the winter wheat crop. Then came what looked like a good break—rains ended the drought and saved much of the wheat. The trouble is that it hasn't stopped raining since, and many farmers in eastern Kansas and nearby areas of Nebraska, Oklahoma, and Missouri have been wiped out by floods. Even in areas not completely flooded out, the wet weather has increased insect activity and weeds and has interfered with harvesting schedules.

The worst damage has been to Kansas' wheat crop. Last year the state harvested 178-million bu., which was about 15-million bu. below average. On June 1 the Agriculture Dept. estimated this year's crop at 161-million bu.; on July 1 it dropped the estimate to 148-million bu., which would make 1951 the lowest since 1943's 144-million bu. And after this month's disastrous floods, the final harvest figures are likely to be even lower than that.

Oklahoma's wheat harvest will also be far below average, principally because of the drought damage. Only in Nebraska will the wheat crop exceed the long-term average; serious flood damage has been pretty much confined to the southeastern quarter of the state.

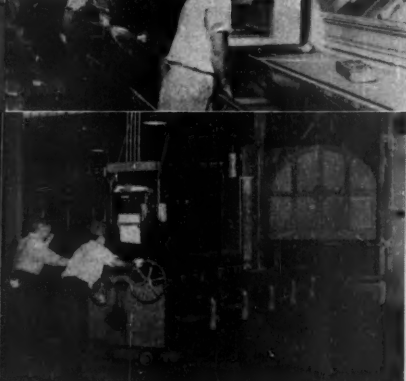
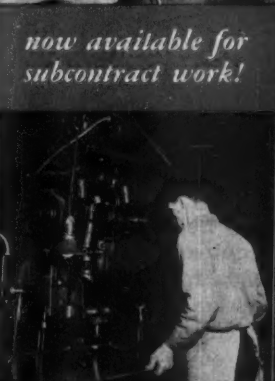
Corn has also suffered from wet weather in Oklahoma, Kansas, and Nebraska. Corn is of real importance, however, only in Nebraska, and there the crop is estimated at 225-million



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Quaker Conveyor Belting is saving labor and handling expenses in practically every type of production.

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bu., down 10% from last year. For the region as a whole the estimate is 369-million bu., down 15%. The crop is very late, though, and there's a real danger that it won't be ready for harvest before the first frost.

Cotton is an important crop in Oklahoma, and the crop is off to a good start despite the wet weather. Acreage is way up—a good bit of it on wheat fields in the western part of the state that failed completely during the winter drought. But the rains have encouraged the onset of a heavy crop of boll weevils, particularly in the central and eastern counties.

In contrast to the havoc wrought by the weather in the eastern states of the region, the western states—Colorado and Wyoming—have made out very well. Colorado's winter wheat crop will be bigger than average, though a good bit below last year's. And its sugar beets, around Weld County, in the northwestern quarter of the state, are in excellent condition.

The people who have really benefited from the rain are the livestock raisers. Pasture land has made a good recovery from the drought; condition is rated good to excellent throughout the region. There are a few exceptions—eastern Oklahoma, southwestern Colorado, and northwestern New Mexico. The last is in the worst shape.

Elsewhere in the district, however, the abundance of grass means heavy weight on the grass-fed bees when they are marketed in the fall—and that means more income for the cattle men.

The drought-plagued eastern counties of the region can count one small plus: The spring pig crop was second-highest in history, and the fall crop is expected to be near-record, too. That means dollars in corn-hog farmers' pockets starting this fall.

The region's industrial cities are still booming along. Denver, with its accent on small plants, is not getting so large a share of the war contracts as it would like. Unemployment is still low, but some skilled workers are beginning to quit their jobs and move out to higher-paying defense work. Housing is definitely easier, with some rental housing publicly available. The \$45-million plant that AEC is building northwest of town should do much to beef up the city's economy; at least 5,000 will be employed there.

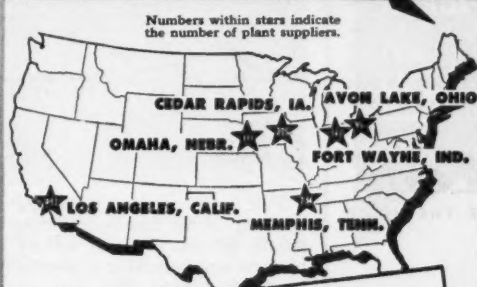
In Oklahoma, labor continues tight in Oklahoma City and Tulsa, and shortages are beginning to appear at Enid and Ponca City. But Muskogee, McAlester, and Bartlesville report labor surpluses and outmigration.

By far the strongest spot in the region is Wichita. Close to 100,000 are working there now. More than a third work in the airplane industry; Boeing alone employs over 21,000, working

2745 Plants in 38 States

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38 States' products are represented when a Fruehauf rolls off the line. Whether for civilian or military use, each Trailer is the result of large and small plants working together ... contributing their share toward a United Defense effort.

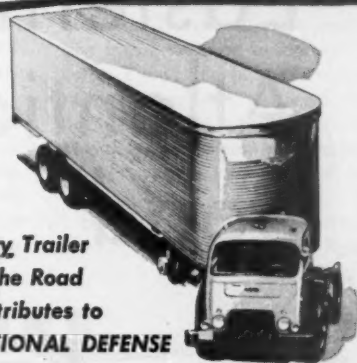
FRUEHAUF has received a number of important defense contracts because we have the ability and facilities to handle them. This is the way our government spreads the work to many plants, large and small, in a united effort to build the Trailers needed — faster!

As a matter of fact, 2745 companies share in the Fruehauf production job. 38 states benefit with more jobs for their communities.

Without the help of these many smaller manufacturers

Fruehauf production lines just wouldn't operate. With their aid, we have been able to establish, month-after-month, new all-time production records.

The Fruehauf defense production picture is being duplicated by many other companies across the nation. It's a perfect example of the manner in which large and small businesses are working together to do a real defense production job. **FRUEHAUF TRAILER COMPANY, DETROIT 32, MICHIGAN.**



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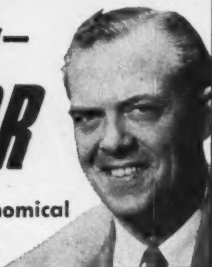
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★ more efficient



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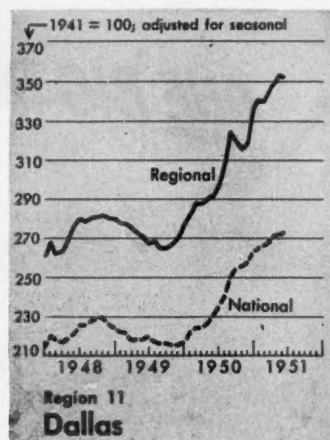
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six-day, 48-hour extended overtime schedules on three shifts. In contrast, total manufacturing employment in 1947 in Sedgwick County, including Wichita, was less than 17,000.

Boeing needs 2,000 more workers immediately, and it's recruiting them from as far away as Memphis, Knoxville, Denver, Joplin, and Omaha.



Two conflicting trends marked the economy of the Southwest during the second quarter. Business activity and nonfarm employment and payrolls continued to expand. But farm income dipped—the result of bad winter and early spring weather in the Panhandle and along the Rio Grande.

It won't be long, though, before both forces are moving up. The region's income prospects for the last half of the year are rosy.

One of the major factors in the region's economy is construction; and it has been having a real boom here this year. Last year was a big construction year, and 1951 contract awards have been running 50% ahead of that in the first six months.

The rise in employment has been fairly general throughout the district. Dallas moved counter to the trend in May, when employment there dropped 1,000, due partly to materials shortages and partly to a seasonal lull in the apparel industry. Even with the drop, unemployment was the lowest of any major labor market in the district—1.7%. By last week the dip had been more than made up, and continued demand for new workers is expected at least through September. The aircraft industry alone, which now employs 11,500 in the city, will need another 7,500 by the end of the year.

Even the Beaumont-Port Arthur area, for the past year one of the weak spots of the region, has taken part in the

employment rise, and both cities are expected to keep rising through the fall. Even so, unemployment is still in the neighborhood of 7%.

Other strong spots in the region include Austin, Corpus Christi, Fort Worth, Houston, and San Antonio.

Farm income prospects are getting better all the time. Texas is the bright spot. Farmers there have planted more than 13-million acres to cotton, the largest acreage since 1933. With any kind of luck, the crop should exceed the 6-million bales harvested in 1949 from 2-million fewer acres.

The weather has been improving steadily, and moisture is generally good except in Nueces and San Patricio Counties, on the Coastal Bend.

The region's grain crops, however, took a terrible drubbing from the weather. Last year's winter wheat harvest of 23-million bu. was considered disastrously low; this year's crop is estimated at 16-million bu. Corn, however, is doing very well.

Citrus trees in the Rio Grande Valley are recovering very slowly from last winter's freeze. Production in the 1951-52 season will be negligible.

Livestock will be a big income producer. The region started the year with a record-breaking number of cattle, and there are even more today. Pastures, badly damaged by the drought, have recovered markedly since the first of last month.



Another period of consolidation of gains seems to be under way in this area. Over-all, industrial activity and employment have been just about flat for the past couple of months. There has been a slight rise since the end of June, but it's still too early to tell whether it means anything. Best guess is that there will be very little change one way or the other through the third quarter, followed by a stepup in activity in the fourth.

Employmentwise, gains in such defense industries as steel, planes, and machine tools have been offset by layoffs in auto parts, appliances, paper,

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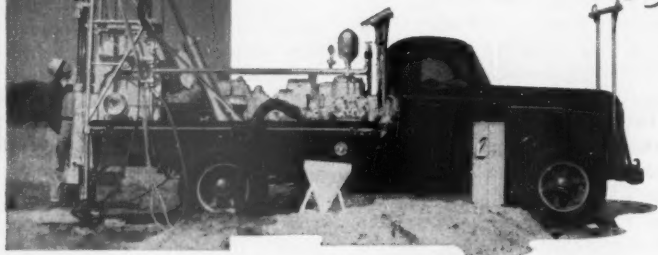
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rubber products, and apparel. Weakness is particularly apparent in the appliance industry—GM's Frigidaire division at Dayton and Avco's Crosley division at Cincinnati have each laid off several hundred workers.

The steel industry is probably the region's biggest source of consistent strength. But this contributes to the flat trend of the region's economy—because an industry that's operating regularly at levels above its rated capacity can't go any higher.

But another of this region's major industries, machine tools, does have somewhere to go, and it's going. Production has risen to an annual rate of \$700-million a year, the highest in seven years. Yet that's less than 25% of the goal the government has set for the tool builders. And new orders are coming in much faster than old ones are being filled; the unfilled-order backlog has zoomed to 20 months' output at the current rate.

Metalworking industries report some trouble getting raw materials. By and large, though, very few companies are actually suffering from lack of materials. The supply is uncomfortably low in relation to in-process orders, but that's all so far.

A more pressing problem seems to be manpower. Such skilled help as turret lathe and boring mill operators and engineers is almost impossible to find; employers are using newspaper, radio, and TV advertising without much success. Nevertheless, most employers are still not working much overtime, nor on Saturdays and Sundays.

Akron's rubber-products industry is still in something of a slump. But the new government order permitting five tires on new cars again will give the rubber capital a big lift.

Columbus is currently one of the strongest spots in the region. Employment there is at an all-time high and rising steadily. Just as one example, North American Aviation, which now employs 5,000 at the former Curtiss-Wright plant, will up that to 17,000 by the end of next year. Pittsburgh is strong, as is to be expected of a steel-based economy these days. Dayton is also holding steady despite the Frigidaire layoffs, due mostly to heavy hiring at government installations, particularly the Wright-Patterson Air Base.

Prospects for the region's farmers are outstandingly good. The weather has been generally favorable, and livestock and nearly all crops are doing well.

Corn is outstanding. (Though Ohio isn't generally thought of as a corn state, it's always up among the top seven.) The "knee high by the Fourth of July" axiom was far exceeded here, with corn up to shoulder height before the end of June.

Small grains have not done so well;

MEMO FROM: J.H.S.

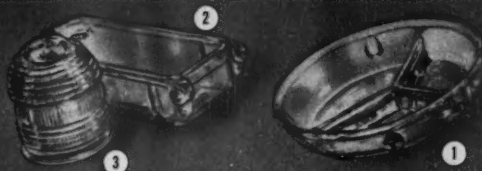
TO: G.H.L.

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| 1 Mealpak dish | 8 Range burner plate |
| 2 Sterilizer tray | 9 Coffee maker filter rod |
| 3 Airport marker lens | 10 Gauge and sight glasses |
| 4 Godet wheel | 11 Lens blanks |
| 5 Watch glass | 12 Lighting lens |
| 6 Laboratory desiccator | 13 Stage light lens |
| 7 Neon sign insulator | 14 Tops for percolators |

1851 *Corning means research in Glass* 1951

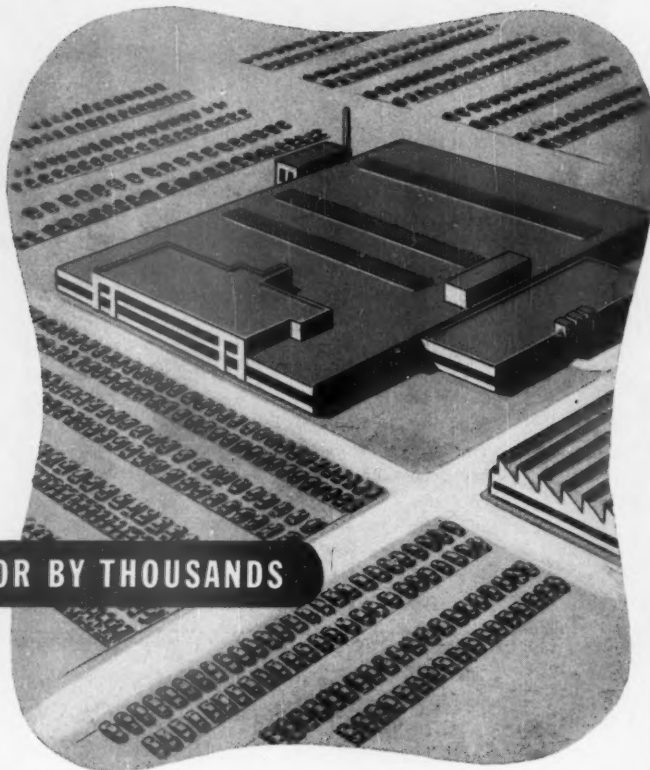
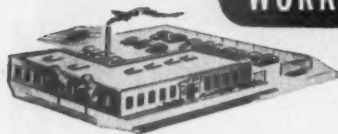
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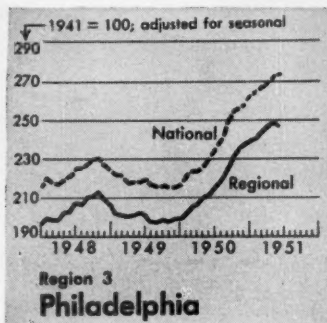
Group Division AETNA LIFE INSURANCE COMPANY Hartford, Conn.



winter wheat was damaged by heaving last winter, which has brought estimated per-acre yield well below both last year and the average.

Eastern Kentucky tobacco has improved sharply during the past month. Through early June the area was plagued by drought, but the recent rains have made up for it; the burley crop is now estimated at least 10% better than last year's.

The district's largest single source of farm income is livestock and livestock products, and here the prospects are best of all. Western Ohio's corn-hog counties had a near-record farrowing of spring pigs, and the fall crop is likely to be the third-largest in history. Furthermore, favorable weather has boosted the pig survival rate. Lush pastures guarantee good forage for beef and dairy herds. Ohio is setting new records in milk production this year, and Kentucky is at near-record levels. Egg production is higher than last year in Ohio and Pennsylvania.



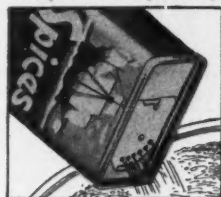
After a slight slump in May and early June, the region's economy seems to have started on a midsummer upward trend. Strength in most durable goods industries is more than making up for slight weakness in such nondurables as apparel and shoes.

Lancaster, Harrisburg, and Wilmington continue among the region's strong points. Lancaster had a slight dip earlier this year, but manufacturers have now reemployed workers laid off then and will need about 600 new employees within the next month. At Harrisburg, the federal government plans to add 600 employees soon, and Thompson Products will need about 1,500 workers for its jet-engine-parts plant.

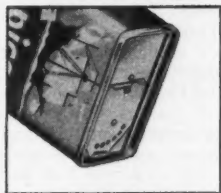
In Wilmington employment continues to set new highs each month; payrolls are now about 30% higher than a year ago. The rate of increase has slackened, however—in part because there aren't enough fully qualified workers. Worker migration into Wilmington is rising; the men are coming mostly from the still-depressed Scrani-



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ton-Wilkes-Barre area and from western Maryland and West Virginia.

Wilmington's economy is scheduled to get another boost next month; the \$44-million Delaware Memorial Bridge will open for traffic Aug. 16. The city expects the bridge to pave the way for a big expansion; retailers hope to benefit most, because the bridge will bring the residents of nearby south Jersey into the Wilmington shopping area. The bridge is also expected to promote increased industrialization of south Jersey itself, particularly the area around Deepwater Point, across the Delaware from Wilmington.

Other strong spots in the area are Trenton, York, and Allentown-Bethlehem. At Johnstown, which was a distress area as recently as a year ago, employment is at a record high and is still rising. Metals and metal-fabricating industries are the star performers.

Altoona, which staged a remarkable recovery last year, is down in the dumps again, with 4,000 of its approximately 50,000 nonfarm workers idle. Chief cause: The Pennsylvania R.R., the city's biggest employer, laid off 3,500 in mid-May. Two firms in the area are expanding: Heating Equipment is adding 300 workers at Duncansville, and John R. Wald Co. 150, mostly women, at Tyrone.

Things are getting no better in Pottsville, one of the nation's few remaining distress areas. Apparel companies have laid off 600 more workers in recent weeks; several shoe manufacturers have shut down. Outmigration is increasing.

In Philadelphia itself, business is running along just about even, at levels slightly below last spring's peak. Most important contributor to the decline has been the radio-TV industry, a major factor in Philadelphia.

The region's farmers are on their way to a wonderful year. Just about every factor has been in their favor, including good growing weather, favorable feed-price ratios for milk and eggs, rising demand for dairy and poultry products. The important fruit and vegetable crops will mostly be larger than last year's, and prices will be higher. Only flaw so far has been too much rain in the early haying season.

The region's peach crop is expected to be particularly profitable; the pick is estimated at 5-million bu., 1-million above average. Pennsylvania is also counting on a sizable pear crop, a near-record cherry output, and an apple crop of top-notch quality. Delaware's tomato output will be 20% above last year's. In New Jersey the strawberry crop is close to a record, and the apple crop is promising. The south Jersey truck farming area is also doing very well.

They use costly 3-stage carbide dies to stamp transformer core laminations at 210 strokes a minute in this 50 ton Danly Auto-feed Press at Kobzy Tool Company, Chicago. Unique Danly features assure longer uninterrupted production runs, longer die life and greater return on the die investment!

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READERS REPORT

Flour Mill Facts

Sirs:

I question a few of the statements made in your interesting article on flour milling [BW—Jun. 9'51, p42]: I wonder if the misinformation may not have been gathered from Allis-Chalmers' mill builders or our good friends and worthy competitors across the street, General Mills.

You state that the Los Angeles plant of General Mills is the first complete milling unit built in this country in 25 years. In 1948 we completed what, in our opinion, if not more "modern" in the adaptation of certain unproven innovations, is a finer and more practical mill in every respect. Also, it is approximately four times larger than the General Mills plant at Los Angeles.

I wonder, too, what ancient archives produced the picture of a mill doing things in the "old way." I have no doubt it was an authentic photograph, but I am sure it is not representative of the housekeeping any self-respecting miller would maintain; it does not look much more modern than the 80's.

These facts seem to indicate the desirability of your editors' looking a little further when endeavoring to gather up-to-date information.

L. F. MILLER

PRESIDENT,
RUSSELL-MILLER MILLING CO.,
MINNEAPOLIS, MINN.

• What BUSINESS WEEK had intended to say—and somehow managed not to—is that the General Mills plant is the one completely new flour mill built in the country in the past 25 years. That is, it is built in a new location, provides new capacity, and incorporates all the newest (some of them quite untried) devices such as pneumatic conveying and electronic controls. Our understanding is that all other new plants have been built to increase existing capacity or replace plants previously in operation.

The picture labeled "old way" was not supposed to be a typical mill photo of today, but rather one showing an old-style mill. It is an authentic picture, however, and symbolizes the fact that there is plenty of room for improvement and modernization in the industry.

Tax Collection Slip?

Sirs:

I read with interest your article on taxes paid by Americans who are working abroad [BW—Jun. 2'51, p94]. I think the paragraph dealing with Mr.

SLICING WOOD INTO WAFERS

KEEPS
YOUR
CAR
ON THE
GO



You jab the starter and go. As those hundred-odd horses leap to life, chances are dozens of wood separators help your battery crack its mighty whip. These little separators do a big job. Submerged in a solution of sulphuric acid, sandwiched between lead plates, jostled and jounced—they insulate adjacent plates yet permit full electrolytic action.

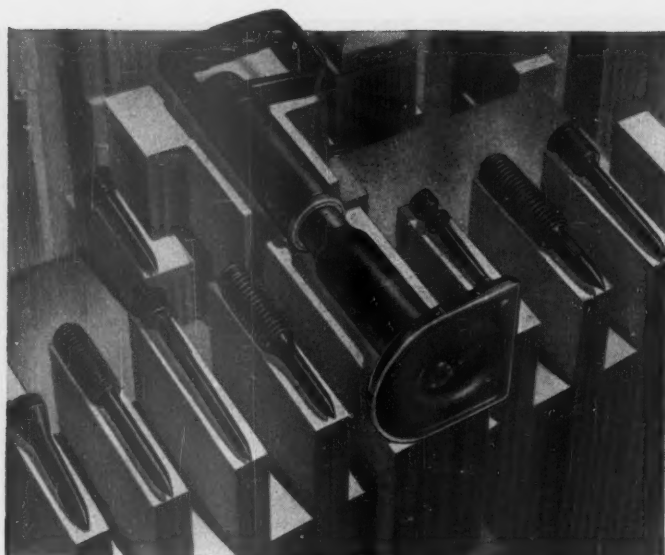
Here are two reasons why these separators cost so little yet last so long. Evans engineers revolutionized their manufacture, slicing them wafer thin to slash costs. Evans technicians, working in Evans' own wood products laboratory, perfected processing methods that multiplied life. Result: economical, dependable battery power for automobiles, trucks, aircraft, submarines, hospitals. From Evans timber to product, the same Evans zeal for putting wood to work better, faster, at less cost, is yours to command. *Evans Products Company, General Offices: Plymouth, Michigan. Plants: Plymouth, Mich.; Coos Bay, Ore.; Vancouver, B. C.*



EVANS

...ENGINEERS IDEAS INTO INDUSTRIES...





ESSENTIAL FOR EVERY BUILDING...

Ramset "tops" all other methods

To finish the work sooner, on new construction, alterations or building maintenance, see that **RAMSET® SYSTEM** is utilized for every possible fastening job.

For most of the thousands of fasteners needed to install services, facilities and equipment, **RAMSET** reduces to short minutes the long hours required by conventional methods. Actually about 10 times as fast, **RAMSET** saves vitally needed man power, drastically reduces costs... and enables

you to occupy buildings and put machines and facilities to work, sooner.

No other fastening system sets like **RAMSET**... no other method matches **RAMSET's** combination of speed, economy and versatility. **RAMSET** is foremost in powder-actuated fastenings—and is the *only integrated system*.

Send for details on how **RAMSET** can save man power, time and money on almost any construction or maintenance job. Use the handy coupon.

Ramset Fasteners, Inc.

12125 BERE A ROAD • CLEVELAND 11, OHIO

Please send details on **RAMSET FASTENING SYSTEM** and give us name of nearest **RAMSET Dealer**.

Name _____
Company _____
Street _____
City _____ State _____

Bachre (the American auditor who went to live in Edmonton) gives the wrong impression, however. You state that he paid no income tax in Canada. Mr. Bachre should have paid tax in Canada, and in all probability he left here without the blessing of the tax authorities. Under Canadian tax laws he would be liable to tax if he were here for more than 183 days.

R. J. MCGINLEY

TORONTO, ONT.

• Reader McGinley is undoubtedly right about Canadian tax law. According to the Tax Court decision, Mr. Bachre had not paid any Canadian tax. It may well be, however, that he did pay a Canadian tax subsequent to the hearing of this case.

Secretarial Salute

Sirs:

Congratulations on an excellent article, "Secretaries Analyze their Problems—and the Boss" [BW—Jun.30'51, p78]. Congratulations, too, to the Pennsylvania Salt Mfg. Co. for their pioneering in these "workshops for secretaries." Wouldn't it be interesting and beneficial if this idea could be carried out on a nationwide basis?

My employer, a subscriber to your magazine, called my attention to this article, and he, too, expressed his belief in the power of the idea behind it. Here's hoping the scope of this idea can be widened so that we secretaries in smaller businesses may benefit.

PATRICIA KOTROMANIS
MARTINSBURG, W. VA.

Drama Forerunner

Sirs:

More power to Brown-Forman for "Putting Drama in Sales Meetings" [BW—Jun.16'51,p136] and to **BUSINESS WEEK** for lively reporting. Dictaphone Corp. has been putting drama in sales meetings (sans professionals) for 15 years. It all began with a skit called "Two Salesmen in Search of an Order," which was so popular and so basic that the corporation produced a full-dress half-hour professional motion picture by the same name. This film has become a sort of classic, has been seen by only 10-million people, and is still heavily booked.

A. DONALD BRICE
DICTAPHONE CORP.
NEW YORK CITY

Letters should be addressed to Readers Report Editor, **BUSINESS WEEK**, 330 West 42nd Street, New York 18, N. Y.

Today's new machine
for today's new problems!



The incomparable new Burroughs Sensimatic

ACCOUNTING MACHINE

SERIES 200

Big machine speed and versatility . . . small machine simplicity . . . medium machine price!

That's one way to sum up the sensational new Burroughs Sensimatic with multiple registers. Watch its swift, automatically-directed performance . . . see the completeness of its easy-to-learn, easy-to-use operational features . . . and you'll appreciate what the Sensimatic can do to step up productivity for your business.

And we're ready to show you. Call for a Sensimatic demonstration today...you'll find Burroughs in the yellow pages of your telephone book. Burroughs Adding Machine Company, Detroit 32, Michigan.



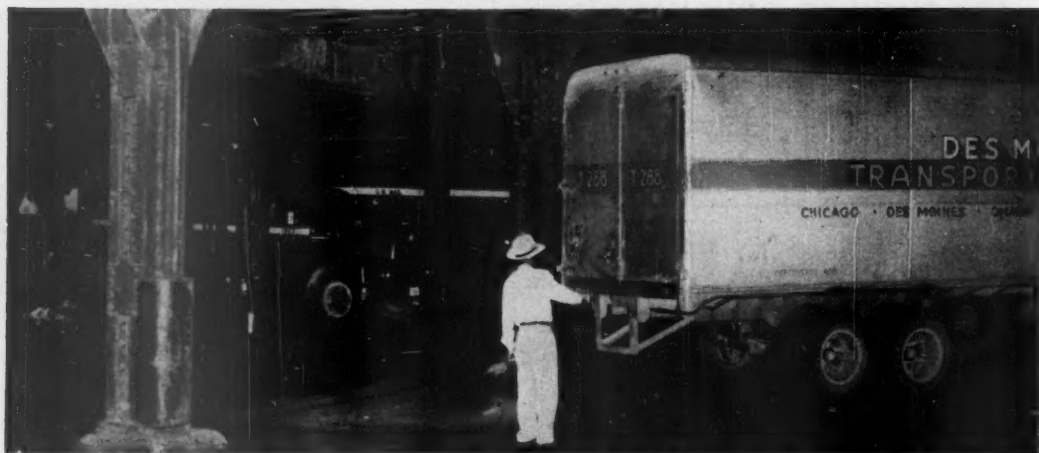
Here's why the Sensimatic
can handle any accounting job!

This control panel, or sense plate, directs every carriage movement, every mathematical function. Each panel controls four separate accounting operations—in any combination. Panels are instantly interchangeable . . . there's no limit to the number that can be used.

WHEREVER THERE'S BUSINESS THERE'S

Burroughs

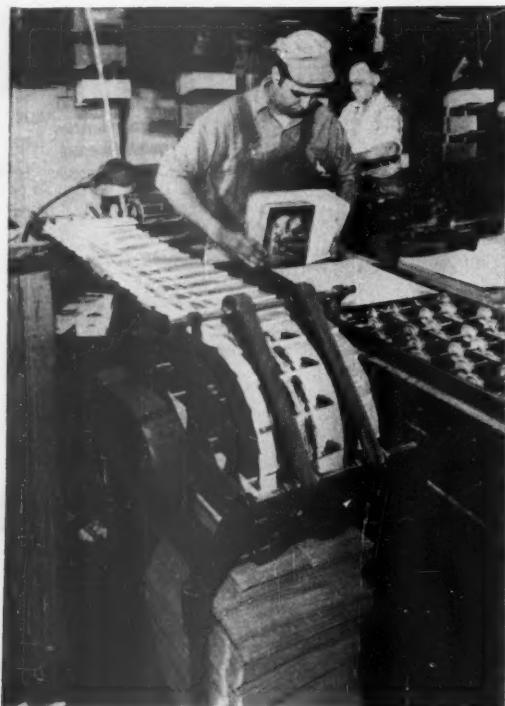
TRANSPORTATION



DELAYS AND DAMAGE of multiple postal handling are eliminated by trucks like this working for Meredith Publishing Co.

Trucks Take Kinks Out of the Mail

(STORY ON PAGE 90)



ADDRESSING magazines is first step in Meredith system, which helped give Post Office idea of using truck delivery.



MAGAZINES for a common destination are packaged together, dropped into mail sack that bears the proper postal "key."



CONVEYOR carries mail sacks to trucks, which will deliver them direct to mail train in city hundreds of miles away.

How
many
working
hours
in a
summer
day?

That depends! The hotter the day, the fewer. Time is lost watching the clock... at the water-cooler... on the job. Everybody lets down. And that's not a healthy situation these days when pressure's on for defense production!

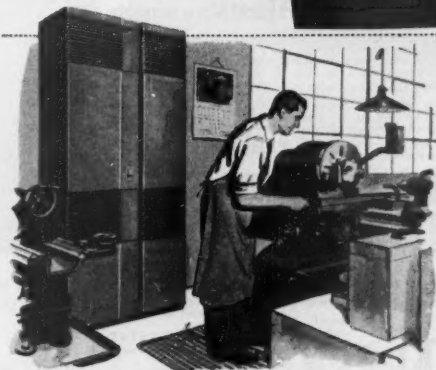
To get more work done in hot weather, install a Carrier Weathermaker. It tames heat and humidity, makes the air refreshingly cool. It builds morale, cuts down absenteeism, gets results *better, faster, cheaper* in machine shops, drafting rooms, offices, laboratories and stores.

"A Carrier Weathermaker is my best investment," many business men say. "There's no air conditioner like it." And that's a fact, because it's Carrier-engineered. Installation's often only a matter of hours. But don't wait until heat hits! See your Carrier dealer now. He is listed in your Classified Telephone Directory. Or write Carrier Corporation, Syracuse 1, New York.

Get set for a productive summer with a Carrier Weathermaker. Only a Weathermaker offers all this:

- Exclusive Controlled Cooling**—avoids that clammy feeling.
- Exclusive Humitrol**—removes more moisture from the air on sultry days.
- Exclusive Even-flo Air Distribution**—air conditions without dead spots or drafts.
- Exclusive Whisper-quiet Operation**—you scarcely know it's running.
- Hermetic Compressor**—completely sealed. Nothing to oil or adjust.
- Low Operating Cost**—saves electricity and water consumption.

New Carrier Room Air Conditioners for your home or office. You can choose your weather to fit the day—sleep relaxed, work refreshed. Quickly installed. Easily moved. Choice of custom colors.



AIR CONDITIONING REFRIGERATION

Year in and year out
you'll do well with the
HARTFORD



—all forms of fire, marine
and casualty insurance and
fidelity and surety bonds.

See your Hartford agent
or insurance broker

**HARTFORD FIRE
INSURANCE COMPANY
HARTFORD ACCIDENT
AND INDEMNITY COMPANY
HARTFORD LIVE STOCK
INSURANCE COMPANY
HARTFORD 15, CONNECTICUT**



Major Motor Manufacturer Praises KLIXON Protection Against Motor Burnouts

LOS ANGELES, CAL: Philip Hawkins, Shop Foreman of Wagner Electric Corporation's Los Angeles division, is a man whose word on motor protection is backed by plenty of experience.

Says Mr. Hawkins:

"It is our experience that those motors equipped with KLIXON Inherent Overheating Protectors constitute but a small percentage of those we see with burned out windings."

"We believe that KLIXON Protectors contribute much to prevent motor burnouts."

The KLIXON Protector illustrated is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer preference, reduced service calls and minimized repairs and replacements, it will pay you well to ask for equipment with KLIXON Protectors.



Manual reset
KLIXON
SPENCER THERMOSTAT
Div. of Matsui & Central Corp.
2607 FOREST STREET
ATTLEBORO, MASS.

"... the mail won't lie around on sidings or under- go numerous resortings ..."

MEREDITH TRUCKING pictures on p. 88

Big bulk mailers have an eager eye fixed on the Post Office's new program of shipping by truck instead of rail on hauls of less than 200 mi. They know that the plan is supposed to save the PO \$50-million a year. But the question in the mailers' minds is: What good will it do us?

The answer would be plenty, if you could take the example of the Meredith Publishing Co., which puts out Better Homes & Gardens and Successful Farming. Meredith has pioneered the truck delivery business on its own for years; its experience was studied by the PO in making its own plans. In effect, Meredith has found that it eliminated great loss by damage and delay, without appreciable added cost.

• **Went Further**—Other mailers won't reap benefits on the scale that Meredith did, just because the PO is substituting trucks on short hauls. Meredith went much further than mere trucking; actually, it took over a large part of the Post Office's work. Other mailers will benefit in two ways from the PO change of policy. But both benefits will be limited to deliveries within the 200-mi. radius:

• Deliveries will be speeded up because the mail won't have to lie around on sidings or undergo numerous resortings.

• Mailings will arrive in better condition, being freed from the perils of multiple handling.

Thus the Post Office plan shapes up as offering handsome, but limited, benefits to mailers generally, without effort on their part. Meredith, of course, went way beyond that. The company made very great efforts, and its benefits were great.

• **Bottlenecks**—For something like 20 years, Meredith has dabbled in truck deliveries from its plant in Des Moines. In 1946 traffic manager William McKowen made one of his periodic surveys of how the customers were doing. They were doing very badly. As an example, the run from Des Moines to Milwaukee was sometimes taking as long as 10 days. Sometimes as many as half the magazines were reaching the customer so battered as to be "unacceptable." That last was a tough problem for BH&G, which runs as high as 300 pages an issue, which means side-stitching and susceptibility to damage.

The root of the evil, McKowen found, was still in too many handlings and too much sitting around in sid-

ings or in separation centers. Packages of magazines bound from Des Moines to Milwaukee were handled six separate times in the Chicago mail separation center alone. That meant a couple of days lost and a lot of pickings up and droppings.

McKowen went into conference with the Post Office people; from these talks emerged a system by which he virtually went into the Post Office business. Key to the PO operation—and to re-handlings and loss of time—was the "keying" of mail. That means giving each sack the proper code to steer it safely to its destination. As a big mailing fans out in a region, it goes through a lot of handlings.

• **Sorting**—What McKowen did was to get permission to use the PO codes himself. Mailers at Meredith sorted the packages of magazines into the right mail sacks, marked with the right codes. By that step, the loss of keying time in the Post Offices was eliminated.

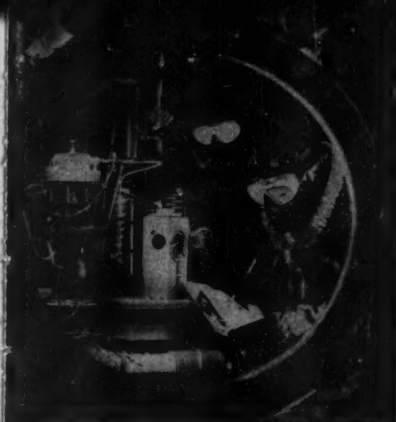
Next step was to get rid of delays in transshipment. Meredith, aided by the big trucks of the Des Moines Transportation Co. and other firms, found the answer to that one, too. The sacks were trucked directly from Des Moines to the cities where they would be assured of a direct train run to their ultimate destination.

The Milwaukee run, once a horrible example, shows how this works. Milwaukee-bound sacks, properly keyed, are trucked directly from Meredith's plant to the Chicago station from which the Milwaukee train will leave. Thus virtually all Post Office handling is eliminated till after Chicago.

• **Advantages**—Meredith wasn't trying to save money; its goal was to eliminate damage and delay. But cost of the trucking proved negligible, with the expenses just about balanced out by lower mail costs for the shorter PO haul. And the gain in time and quality was immense. The Milwaukee trip, which at its worst had hit 10 days, was pared down to a consistent 40 hours. Damage, which had run as high as 50%, pared down to a satisfactory 3% or less.

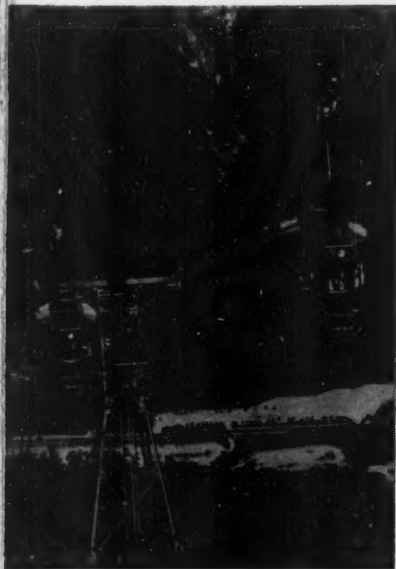
The Post Office truck project, being limited to 200-mi. radii, is not going to confer many benefits of that scope. But it will speed up a lot of mail while saving money for the government. When all the contracts now being processed are awarded, the PO believes that deliveries now costing about \$100-million a year will be made for half of that.

The savings come in two main ways. Actual haulage costs are lower on the shorter runs, with the gap shrinking as the distance increases. And the use of trucks reduces handlings, a big item in mailing expense.



Boeing Airplane Company Photo

HOW COLD CAN IT GET? That's a mighty important question, when it comes to steel that must be used where it is exposed to sub-zero temperatures. The critical aircraft part, for instance, being tested in this low-temperature chamber by "men from Mars," must operate dependably, no matter how cold it gets thousands of feet above the earth. United States Steel makes special alloy steels for low temperature applications of all kinds.



MOUNTAIN CLIMBING THE EASY WAY. If you want to get to the top of 3000-foot Cannon Mountain in New Hampshire, and enjoy the magnificent White Mountain view from its summit, the easy way is to ride the aerial tramway. You'll swing gently in the observation car, high above the trees, carried up the slope on strong cables of U-S-S TIGER BRAND Wire Rope (made by U.S. Steel).

THE TIE THAT BINDS IS STEEL. These packages of rations, stockpiled at a Korean base, are tied for safe shipment with Gerrard Round Steel Strapping, made by U.S. Steel. This is just one of thousands of purposes for which steel is needed, in these days of mobilization, both for military and essential peacetime uses.



**Only STEEL
can do so many
jobs so well...**

"BUILDING COLLAPSING! HURRY!" A few months ago, U.S. Steel Supply Company in St. Paul, Minnesota, got a hurry-up order for 12 60-foot steel beams . . . to be used to tie a collapsing building together. With a police escort, the beams were rushed to the scene, and the tottering building braced with steel so that it was no longer a hazard to passers-by. Only steel can do so many jobs so well.

...and this trade-mark is your guide to quality steel



FACTS YOU SHOULD KNOW ABOUT STEEL

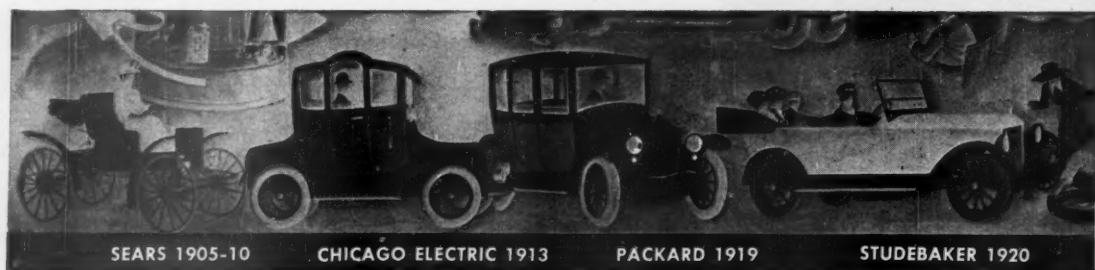
In 1950, the American steel industry shipped approximately 71.5 million tons of steel to consumers, only 3% less than was used for direct war purposes during all of World War II.

Listen to . . . NBC Symphony Orchestra presented every Sunday evening by United States Steel National Broadcasting Company, coast-to-coast network. Consult your newspaper for time and station.

UNITED STATES STEEL

Helping to Build a Better America

AMERICAN BRIDGE COMPANY • AMERICAN STEEL & WIRE COMPANY and CYCLOPE FENCE DIVISION • COLUMBIA STEEL COMPANY • CONSOLIDATED WESTERN STEEL CORPORATION • GERRARD STEEL STRAPPING COMPANY
GUNDRON HOBBS, INC. • NATIONAL TUBE COMPANY • OIL WELL SUPPLY COMPANY • TENNESSEE COAL, IRON & RAILROAD COMPANY • UNION SUPPLY COMPANY • UNITED STATES STEEL COMPANY
UNITED STATES STEEL EXPORT COMPANY • UNITED STATES STEEL PRODUCTS COMPANY • UNITED STATES STEEL SUPPLY COMPANY • UNIVERSAL ATLAS CEMENT COMPANY • VIRGINIA BRIDGE COMPANY





REO 1905



MODEL "T" FORD 1908

The Auto's Portrait Album On Insurance Co's Walls

Watching the baby grow up, via pictures, is a favorite human sport. That gave Allstate Insurance Co. the idea that the life story of its favorite industrial product would look nice in pictures, too. Which is why the lobby of Allstate's new office in Chicago is festooned with the story of the automobile, as baby, boy, and man.

• **Subsidiary**—Allstate has every reason to be fond of the gasoline buggy. The company is the auto insurance subsidiary of Sears, Roebuck & Co. Last year it took in \$7.8-million in net premiums from its business all over the United States.

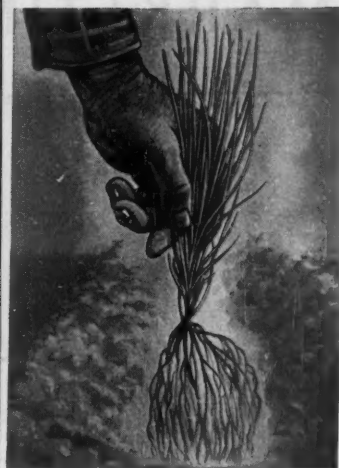
To show its affection, Allstate commissioned artist Eugene Montgomery to do the auto's biography in murals, called "Fifty Years on Wheels."

Two years, 11 panels, and 1,603 sq. ft. of wall space later, Eugene Mont-

gomery had finally finished the portrait gallery.

Picking the cars to illustrate the development was quite a chore. Allstate wanted them to be as typical as possible and to avoid overplugging any one company. Montgomery managed to include a lot more than vehicular baby-pictures. His backgrounds tell something of the impact of the auto—physical as well as economic—on the world around it.

• **Footage Fee**—Allstate doesn't expect to get anything much out of its murals, except some publicity and some nice wall decoration. For that, it's paying quite a pretty penny. Montgomery's fee was figured by square footage, worked out to precisely \$14,933.75. Allstate would rather call it \$15,000, though—the company thinks that sounds nicer.



MOSINEE plants fibres for industry

In Mosinee Industrial Forests, seedlings by the thousands are being planted annually to replace the trees used for products of industry, assuring future supply of fibres vital to many products.

Also, on privately-owned acreage, Mosinee supplies the seedlings and know-how to convert otherwise waste land to fibre-producing forests for the future.

This reforestation is the first step in the process of making Mosinee Fibres that work for industry.

MOSINEE PAPER MILLS CO.
MOSINEE, WISCONSIN



MOSINEE
makes fibres work
for industry

MARKETING

Their first appliance line - and the lines they've added

	Radios	Refrigerators	Electric ranges	Washers	Small appliances	TV sets	Freezers	Driers	Dishwashers	Air conditioning	Ironers	Phonographs	Vacuum cleaners
Admiral	✓	✓	✓			✓						✓	
Apex Electrical Mfg.				✓			✓	✓		✓			✓
Bendix (Avco)				✓			✓			✓			
Crosley (Avco)	✓	✓	✓			✓	✓					✓	
Frigidaire (General Motors)		✓	✓	✓		✓	✓		✓	✓			
General Electric	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hotpoint (GE)		✓	✓	✓		✓	✓	✓		✓			
Kelvinator (Nash-Kelvinator)		✓	✓			✓							
Landers, Frary & Clark			✓	✓	✓					✓			✓
Norge (Borg-Warner)		✓	✓	✓		✓							
Philco	✓	✓	✓			✓	✓		✓		✓		
Radio Corp. of America	✓					✓					✓		
Westinghouse	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

© BUSINESS WEEK

Appliance Makers Keep Spreading Out

Now RCA plans to add other lines to its radio and television business. It's a trend that has been going on for years in the industry.

Word leaked out last week that Radio Corp. of America has tentative plans to go into the appliance business, perhaps in 1952—materials permitting. The chart above indicates that RCA would just be getting into step with the bulk of the radio and appliance industry, which has a long-run tendency to keep spilling over into new fields.

• **Not Talking**—RCA, a top ranker in radio and television, is keeping pretty mum about its diversification plans, which it says are still in the exploratory stage. But it concedes that diversifi-

cation is one way to get around overly seasonal sales—the bane of radio and television makers, and the appliance business as well.

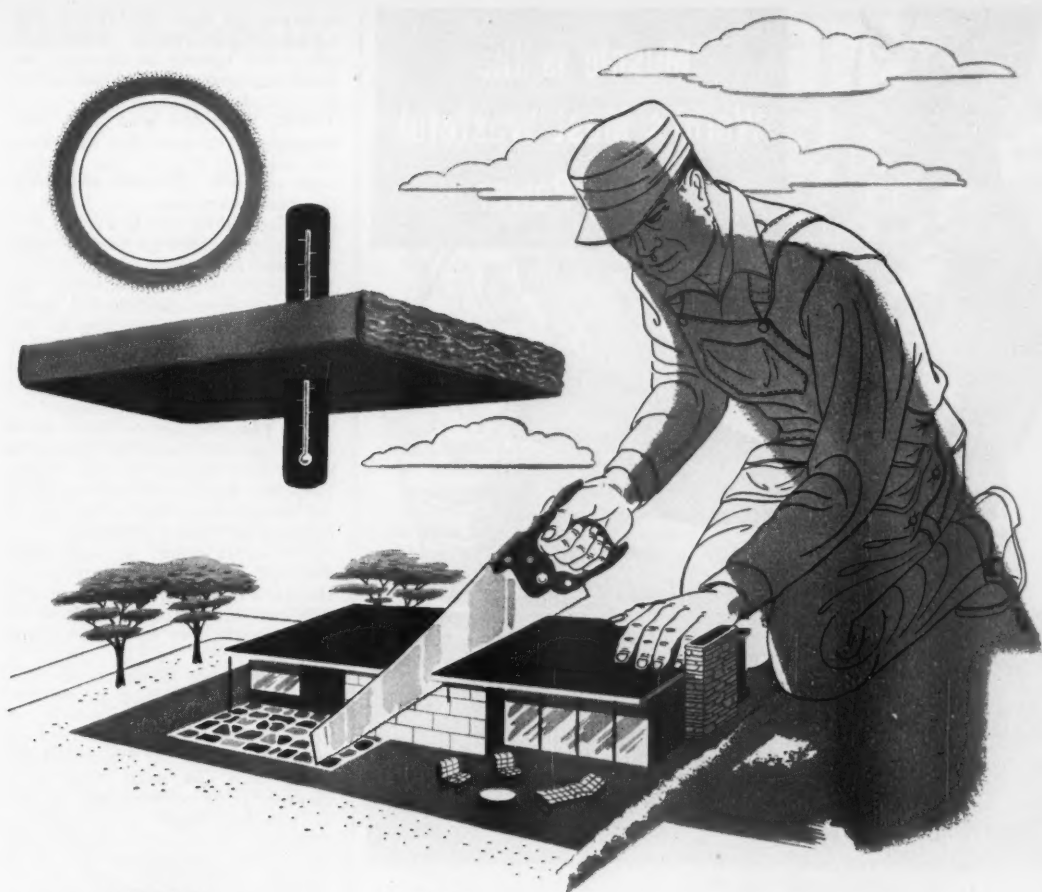
The seasonal problem is one of the main reasons why appliance makers in general have fanned out into more and more lines over the years. Radios drag in summer, pep up in fall and spring. Lately television has taken on radio's pattern (BW—May 5 '51, p. 86). While RCA keeps official silence on what shape its plans would take, it is supposed to be thinking about air condi-

tioners and maybe refrigerators—big summertime items.

• **Distribution Problem**—Diversification has been part of the natural growth of the radio and appliance business. It offers some production advantages. But most of all, it makes for economy and efficiency of distribution.

That's where the seasonal factor comes in. You can't build a strong dealership around a highly seasonal product. If your dealers are going to do a job, they need something that they can sell for more than half the year.

Of course, you can round out your dealer's line with products another company makes. Several big manufac-



TENNESSEE
PRODUCTS & CHEMICAL

Corporation
NASHVILLE, TENNESSEE

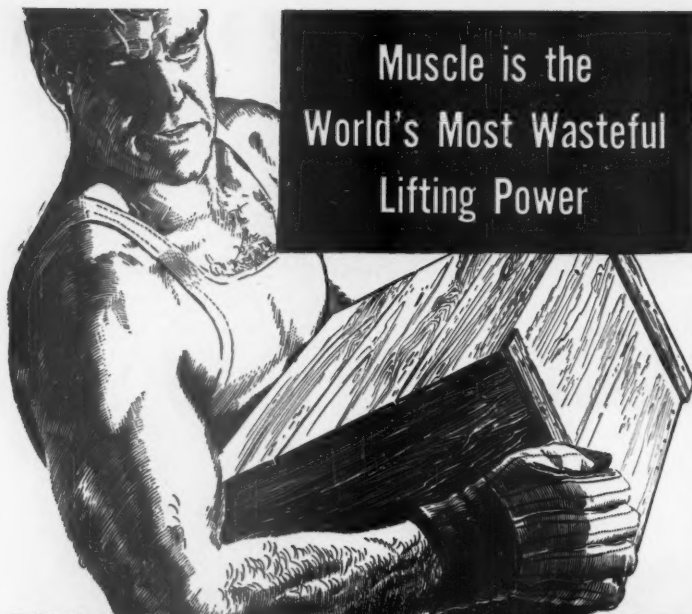
PRODUCERS OF FUELS • METALLURGICAL
PRODUCTS • TENSULATE BUILDING PRO-
DUCTS • AROMATIC CHEMICALS • WOOD
CHEMICALS • AGRICULTURAL CHEMICALS

Concrete **YOU CAN CUT WITH A SAW**

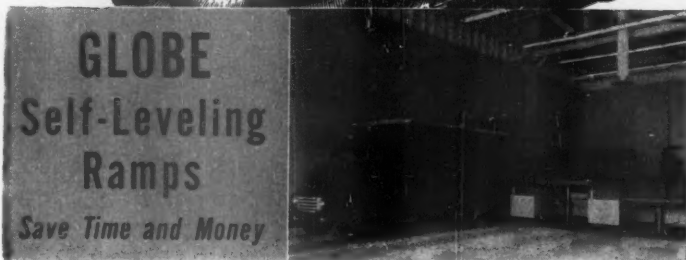
Here's a concrete that reduces building costs.
It's light . . . $\frac{1}{4}$ the weight of ordinary concrete . . . and
crack-resistant. Tennessee's Tensulate Perlite, an expanded
volcanic glass, replaces sand in this concrete . . . makes
it act almost like wood! You can saw it, nail into it,
drill holes through it . . . and without marring.
Plaster made with Tensulate Perlite has all these
advantages, too . . . and goes on faster.

. . . AND A SURE WAY TO BEAT HEAT

Homes are more liveable and cost less to heat
because of Tennessee's Tensulate Mineral Wool Insulation.
It reduces temperatures by 15° . . . keeps you cool in summer . . .
cuts heating bills as much as 40% in winter. These are two of
the many products from Tennessee . . . an industry that
keeps growing by serving industry.



Muscle is the
World's Most Wasteful
Lifting Power



"Muscling" is the expensive way to load or unload trucks. The cheapest way—the safest, fastest way—is to use a GLOBE Self-Leveling Ramp.

The GLOBE Self-Leveling Ramp is readily installed at any loading platform. It provides a hydraulically-positioned gang-plank that instantly adjusts itself to truck or trailer level as vehicle springs flex. Platform workers can wheel cargo on or off trucks without "juggling"—make better time without risking damage to cargo or injury to themselves.

Whatever your lifting problems, GLOBE can supply the right answer. Write today for our book on *modern lifting*. It is full of practical information on money-saving, labor-saving methods of lifting, loading, and handling materials and equipment. Ask for Bulletin BW-311.



GLOBE
OILIFTS



BY THE WORLD'S LARGEST
MAKERS OF HYDRAULIC
LIFTS, ELEVATORS AND
AUTOMOTIVE HOISTS

GLOBE HOIST COMPANY, 1000 E. Mermaid Lane, Philadelphia 18, Pa.
(Factories at Des Moines, Iowa & Philadelphia, Pa.)

turers do just that. RCA-Victor Distributing Corp., wholly owned subsidiary that operates in six cities, has distributed appliances of other makers since just after the war.

• **Good Sense**—It's good sense economically. You have the dealership; you might as well get your money's worth out of it. The same sales force, the same warehouses can handle a diversified line as well as a single one. You get more sales for your overhead costs, and more profits.

It's good sense competitively, too. Once you have established a brand name that means something to the buyer, the name will pay off on other products. Philco reports that the Philco name doubled sales when the company bought the Electromaster toaster.

• **Full Line**—Besides, no dealer wants to lose out to a competitor because he doesn't have so much to offer. Apex, Hotpoint, Crosley—in fact, most of the manufacturers—feel a full line is easier to sell than a short one.

The dealer counts in some other blessings, especially the small dealer. He may not want a carload of ironers; if he can get a mixed carload from the same manufacturer he can save shipping costs.

Actually, it was the dealers who married appliances to radio in the first place. Radio was on its own in the early days—from manufacturer to retailer. When the big appliances came along, they, like radio, were costly items for home consumption. Dealers in both lines began to get together. Gradually, the process worked back through the wholesaler to the manufacturer.

• **Interaction**—Three of the most diversified manufacturers—General Electric, Westinghouse, and Philco—had a special incentive to branch out. Both GE and Westinghouse started with the heavy equipment—generators, turbines—that creates electric current. By making appliances that required electric current, they created new demand for their generators.

Besides, Westinghouse points out, generators and turbines are made to order, take months to finish. Appliances gave the company a real in on mass production.

Philco's story is similar. It began with storage batteries. From batteries to radios was just a step—a step that would help sell more batteries.

Several companies approached the problem from the production angle. Norge says its knowhow in refrigerators spurred the move to stoves and washers. Crosley figured increased over-all production meant lower per-unit costs. Frigidaire feels that, given the development laboratories that are part of an efficient manufacturer's stock in trade, the new products are bound to follow.

Bissell Sweeps Up

The vacuum cleaner once gave Bissell the jitters. But carpet sweeper sales went up instead of down, are still climbing.

In the age of jet propulsion, at least one elbow-grease-driven appliance is holding its own. Bissell Carpet Sweeper Co., Grand Rapids, Mich., is celebrating its 75th birthday with the news that its 1950 sales were the best ever.

• **Sales Go Up**—Back in 1908, when the first commercial vacuum cleaner got on the market, the company had the cold shakes. Fearing slow death for its product, Bissell got set with an experimental vacuum cleaner of its own.

Then the miracle happened. Carpet sweeper sales kept climbing—not spectacularly, but steadily. Bissell quietly put its vacuum cleaner on the shelf—and stuck to carpet sweepers. Except for World War II years, it has made nothing else.

And except for the depression years, it has shown a modest sales increase every year. A family affair from the start, the company withholds actual figures. But it estimates that in 1950 sales were just about double 1908's. In all, it has made 36-million units.

• **A Better Product**—How does Bissell account for all this? First, it had a head start as the dominant manufacturer in its field and has held on to it. It has constantly improved its product, now has 17 active patents on it. The latest models have "Bisco-matic" action, which automatically adjusts the brushes to carpets of different thicknesses with no pressure at all.

To stave off the depression of 1893, Bissell brought out its only peacetime new product—a toy carpet sweeper. Today Bissell makes two: "Little Helper" is a toy and nothing else; "Little Queen" is the real thing, only small, and minus some of the mechanical graces. Little Queen has jumped since the war; it's turning up in airplanes, cruiser yachts, apartments.

• **Need Both**—Heavy national advertising is a factor in Bissell's continued success, says advertising manager P. W. Nickel. In their promotion they have tackled the main problem head-on—to persuade the housewife that she needs both a vacuum cleaner and a carpet sweeper, the one for heavy cleaning and the other for quick pickup work.

Bissell feels it has made real strides in this campaign. A sampling survey made in 1949 indicates that 66% of the U.S. homes have either a carpet sweeper or vacuum cleaner or both. Of the families that own a vacuum cleaner, nearly half also own a carpet sweeper.



SILENTLY, but ruthlessly (even as you are reading this) rust is gnawing away at machines, tanks, fences, pipes, fire escapes, metal sash, stacks—every rustable metal—inside and outdoors!

To protect your investment—to keep every possible pound of new steel for the defense program—to make all rustable metal surfaces last longer—adopt rust control with **RUST-OLEUM** as an important part of your maintenance program.

RUST-OLEUM stops rust! Its tough, pliable, rust-resisting film gives excellent protection that prevents rust losses under many difficult rust-producing conditions.

RUST-OLEUM can be applied even over rusted surfaces. It is not necessary to remove all the rust. Just use wire brush and sharp scraper to remove rust scale and loose rust. Economical and easy to use because no sand blasting or chemical pre-cleaning is required.

RUST-OLEUM can be obtained promptly from Industrial Distributors' stocks in principal cities of the United States and Canada. Anticipate your needs and order now! For complete catalog see *Sweet's*, which also lists your nearest source of supply, or write on your company's letterhead for full information.

RUST-OLEUM CORPORATION

2422 Oakton Street, Evanston, Illinois

RUST-OLEUM

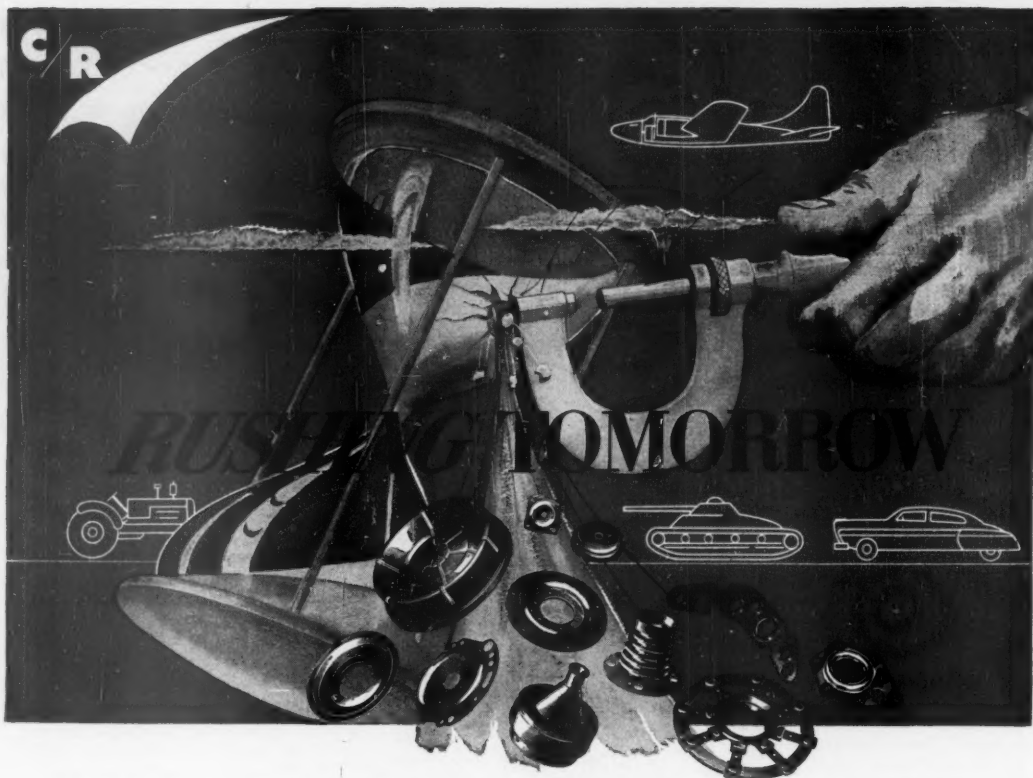
Stops Rust

Available in many **COLORS**, aluminum and white

Beautifies and protects

RUST-OLEUM
RUST PREVENTIVE
DAMP-PROOF RED OIL

"Rigid Economy, Man"



Rushing tomorrow is habitual with American engineers. Those "insurmountable" problems of a few years ago are now everyday, commonplace items. Just like Sirvene parts.

Sirvene has played a continuous, vital role in rushing tomorrow. It, too, is a product of the "impossible". You see, Sirvene is the name which identifies the solution of a manifold variety of problems in the design and development of diaphragms, boots, gaskets, and similar parts for use under extremely critical operating conditions.

If, in your task of "rushing tomorrow", you are developing an urgently needed mechanism in which you require pliable parts to operate *dependably* under severest circumstances, *remember Sirvene*. Produced only by

ENGINEERS: For basic information, write for your copy of "Engineering with Sirvene". There is no charge.

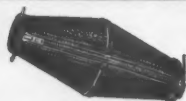
Chicago Rawhide engineers, Sirvene will fulfill your requirements to the letter.

Compounded from pure, oil-resistant elastomers, accurately designed and developed to your specifications, and manufactured in mass quantities under strict laboratory control, Sirvene parts give long service under extremes of heat and cold, in air, oil, water or other solvents, and under high pressures, wear or abrasion. Sirvene can be compounded to possess almost any combination of physical properties and characteristics you require.

Next time you have a pliable parts problem that's tough to lick... chances are, Sirvene can provide the right answer.

CHICAGO RAWHIDE MANUFACTURING CO.

1231 Elston Avenue **SIRVENE DIVISION** Chicago 22, Illinois



SIRVIS

Mechanical Leather Products

Boots, diaphragms, packings and other products give dependable service under difficult operating conditions.



PERFECT Oil Seal

C/R seals are used in more motor vehicles, farm implements and industrial machines than any other shaft-type sealing device.

C/R

SIRVENE

THE SCIENTIFIC COMPOUNDED ELASTOMER

THE MARKETING PATTERN

Fair Trade's Legacy: Ill

IN THE U.S., it has been the retailer, particularly the smaller man, who has thumped the tub for fair trade (BW—Jul. 7 '51, p122). But almost nowhere in retailing do you find the crusading fervor for fair trade that you find among druggists.

The druggist has good cause to feel that way. Fair trade has done a great deal to keep him in business.

Thanks largely to the druggist's personal vigilance, fair trade worked pretty well in his field. It very nearly put a full stop to price cutting and loss-leading—the conditions that brought about the fair trade laws in the depression in the first place. Today the mere threat of a return to price cutting, as a result of the Supreme Court's decision against the nonsigner clause, is enough to send druggists out in droves to demand stronger fair trade laws. Their chief exhibit is the fact that Macy's has sold Bayer's aspirin for as low as 4¢ (BW—Jul. 14 '51, p66).

But the trouble is that the druggist's emphasis on the evils of loss-leading has obscured a major point. In effect fair trade is meant to prevent competition. But in reality it hasn't done that for the druggist. Even with the protection of fair trade he was losing business—fast. And it wasn't really the price-cutting department store that was taking it away from him. It was the supermarket, which did it without cutting prices.

THE SUPERMARKET is today the most dynamic and revolutionary element in U. S. marketing. A mixture of strenuous competition, self-service, and heavy store traffic has produced the lowest overhead in retailing. The average supermarket operates on a very slim margin. The average is 16% or 17%; some supers do better than that. (By comparison, the average department store has a gross margin of about 37%.)

Food stores, of course, have had very few fair trade prices with which to contend. Mainly these have been on the nonfood items they carry. As a result, when OPA and then OPS came to write price orders for grocery stores, it was possible to do so on the basis of the industry's regular price struc-

ture. OPS recognizes four price classes for grocery stores, arranged according to volume. OPS also takes into account the higher cost of doing business where stores have services.

With fair trade pricing orders you get no allowance for either price or service. All stores get one flat price.

THE SUPERS saw profits in the relatively high markups that druggists get on their goods (about 33% on the average). So they began picking up drugstore items that could be sold off self-service shelves—toilet tissues, toothpaste, cosmetics, aspirin, and other items.

In all, more than 100 drugstore items are carried today by supers. According to Super Market Merchandising, the supers' annual volume in these drugstore items is now running about \$400-million.

No matter what happens to fair trade, it is quite possible that this entry of the supermarket into the picture may eventually change the whole pricing structure of the drug industry. The supers can sell drugs for less than the drugstores simply by applying their regular price structure. And they can still make a profit. Lower prices would in turn increase over-all drug sales.

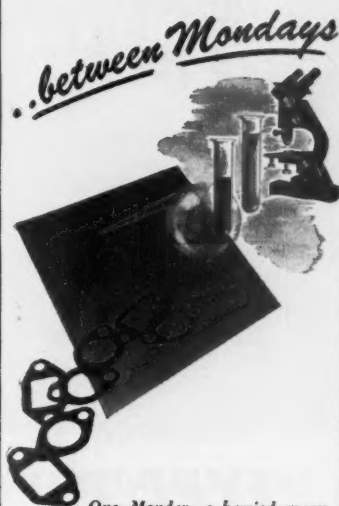
As the supers' share of the business increases, this point will not be lost on manufacturers.

AT THIS POINT it is easy to see that we are no longer dealing with that bete noire of the druggist, loss-leading. This would not be cutting a price here and there to drag in traffic. This would be the reduction in price of a whole class of goods through greater merchandising efficiency.

The druggist has been worried about what's happening to him. But he hasn't been able to do much about it. For he is bucking two economic trends. For one thing, there is the trend—spurred by the supermarket—toward one-stop buying. For another, there is the fact that brand advertising creates presold goods. The customer doesn't need a clerk to talk him into buying, say, Pepsodent. He just wants to pick a tube up off the nearest shelf.

Even fair trade can't stop this process of marketing evolution.

FROM RESEARCH- TO PRODUCTION- TO CUSTOMER...



One Monday, a barred manufacturer came to Rogers and said that his regular supplier had failed — that unless he had gaskets in one week his company's vast assembly lines would shut down.

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THIS NEW DUROID is a Rogers FIBERLOY, one of many special formulations produced by us to meet special requirements. You may be looking for a unique material. Contact us if you are. We are specialists in special formulations. You name it — we'll make it and fabricate it, too.



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"Here's Rogers and Its Fiberloys" will help you decide if our materials have a place in your operations. Please write for it to Dept. B, Rogers Corporation, Manchester, Conn.

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Heavy Duty D-c. Motors

3/4 TO 1000 HORSEPOWER

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Wherever motors must meet rugged service requirements, Reliance Type 'T' Heavy Duty D-c. Motors are right in their element! Designed, engineered and constantly improved to satisfy the requirements specified by actual users, these dependable motors have proved their amazing endurance in steel mills, in underground mines and in countless other industrial applications.

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"All Motors are NOT Alike"

Sunkist Fruit Is Quickfrozen

California cooperatives find you can't sell oranges nowadays unless you're in the frozen concentrate line. It sells well, despite premium prices.

In their few short years of public life, frozen concentrates have had a terrific impact on the citrus industry. If you want to sell oranges on a big scale, you've got to be in the concentrate business. That's why California Fruit Growers' Exchange is now ready to go national with concentrates sold under its famous Sunkist label, long a monument in the fresh fruit business.

Growers' Assn. realized the facts of life when it found its fresh fruits being outsold by Florida-processed citrus fruits three to one in its home state. That looked serious for Growers' Exchange, which markets 70% of California's oranges and 85% of its lemons.

- **Trademark**—The big cooperative decided on a full-scale counterattack. It bought back full rights to its famous trademark, Sunkist, from California Packing Corp. (BW—Oct. 7 '50, p91). It conducted a marketing test to see how the Sunkist name would go over in concentrates. It hired the president of Snow Crop Marketers, John I. Moore, to head its marketing setup.

- **In-New England and other areas**, Sunkist concentrates are already selling very well through chain and independent groups. And the big national campaign is ready to start. Within the past couple of weeks, Moore's organization—Concentrates Marketers, Inc.—has set up shop in New York. Field offices are being staffed. Both Moore and Growers' Exchange are confident that by the end of the year Sunkist concentrates will displace General Foods' Birds Eye concentrates for third place in the industry (Snow Crop and Minute Maid are the top two in volume).

- **Lion's Share**—The Sunkist people expect to turn out between 4-million and 5-million gal. of orange concentrate and about 3-million gal. of lemon concentrate. This means that Growers' Exchange will turn out the lion's share of California orange concentrates, which will come to about 6-million gal. this year.

This is still a far cry from the expected Florida output of perhaps 27-million gal. But it promises to put California into the concentrate picture in a big way for the first time.

- **Price Factor**—Until recently Growers' Exchange has felt that price factors ran against California's entry into the concentrate market. Though cannery costs are about the same in the two states, it costs more in California to get the fruit to the cannery. Labor is the big

factor—55¢ an hour in Florida as against \$1 in California. As a result, Florida's breakeven for a can of juice is 8¢, whereas the California breakeven is 14¢. That means California must get at least 23¢ a can. Florida concentrates sell for less.

Growers' Exchange has decided not to fight the citrus battle on the basis of price. Moore points out that Sunkist fresh oranges sell for an average of \$2 a box over Florida oranges. Furthermore, marketing tests made by Growers' Exchange show that Sunkist orange concentrate has such a high acceptance that it can sell at a premium price.

The test was made in Utica, N. Y., a few months ago. In six weeks, Sunkist was able to grab off 27% of the city's concentrate business at a premium price of 1¢ or 2¢ a can. Now advertising has tapered off to normal—and Sunkist is still selling about 30% of the volume at a premium of 2¢ to 3¢.

- **Prestige**—The Sunkist people figure that this is clear evidence of their label's impact. Their pitch to grocers: "The Sunkist label already has \$58-million worth of advertising money in it; it's your most valuable trade name." Moore figures, by contrast, that the total amount of advertising money poured into the whole frozen food industry since its inception only comes to about \$40-million.

Growers' Exchange is, of course, an old hand at processing. It has been processing oranges since 1921. And it has been turning out frozen concentrates for a year (it now has three concentrate plants). But its concentrates have not appeared under the Sunkist label. They have been processed for sale by Snow Crop and Minute Maid under their own labels.

- **Whole Crop**—There are disadvantages to processing for others. If the market is poor, you have to sell at the buyer's price. You don't make so much profit. You are a loser if the buyer decides to cut back his order. In the case of the Exchange, this uncertain situation has had an added disadvantage: As a cooperative, it has to take the entire crop of its members.

Furthermore, there were some clear indications that Growers' Exchange could no longer afford to stay out of concentrates. In the early days, it points out, it was believed that concentrates would put a floor under the fresh fruit market. But something else happened. They put a lid on prices instead. If you

can buy concentrates for 23¢ a can, that's equivalent to paying 27¢ to 30¢ for a dozen fresh oranges. And that, says Growers' Exchange, is too low for profitable fresh fruit operation.

• **Canned Juices**—Growers' Exchange intends to push its lemon concentrates in the South and Midwest, and all its products in Midwest and West. Besides concentrates, it is producing canned juices. And it also has concentrated orangeade.

MARKETING BRIEFS

The Federal Trade Commission rapped six big book publishers—Doubleday; Houghton Mifflin; Little, Brown; Harper; Random House; and Simon & Schuster. FTC says they tend to restrain and eliminate competition by setting minimum retail prices for retailers while book clubs may sell at any price they want to.

• **TV turnabout:** The International Boxing Club, which televised the Louis-Savold fight only to theaters (BW—Jun. 16 '51, p24), decided to let home viewers in on the Charles-Walcott heavyweight championship fight this week. Nine major TV manufacturers underwrote the event.

• **Fair trade developments:** Johnson & Johnson, manufacturers, and McKesson & Robbins, wholesalers, have sued to enjoin Charmley Drug Co., Newark (N. J.) retailer, from selling drugs below fair trade prices. The case may test the validity of price fixing by "invoice legend"—a statement on the invoice by which the buyer agrees not to sell below fair trade prices. . . . Elgin National Watch Co. is preparing new fair trade contracts for its customers in all fair trade states.

• **Slow textile orders** brought shutdowns and shortened work weeks for more Carolina mills. Cone Mills is closing three plants for a week or more. J. P. Stevens is shutting one plant, putting two on short schedules. Burlington and Dan River curtailed most operations.

• **TV ownership** brought an average gain in buying of 26.8% for 30 products, says an NBC survey. Average for 143 brand-program combinations: 37% more customers among program viewers than among nonviewers.

• **The natural gas industry** is fighting hard against proposed government curbs on new gas-heating installations. Frederic Hess, president, Gas Appliance Mfrs. Assn., said the curbs would be disastrous and discriminating.

She can do the work of TEN...



WHEN SHE USES THE DUPLICATOR!

Yes it's true—literally. One typist can do the work not of three or four, but of *ten* when she uses the duplicator to turn out multiple copies of conference reports, sales letters, bulletins, price lists.

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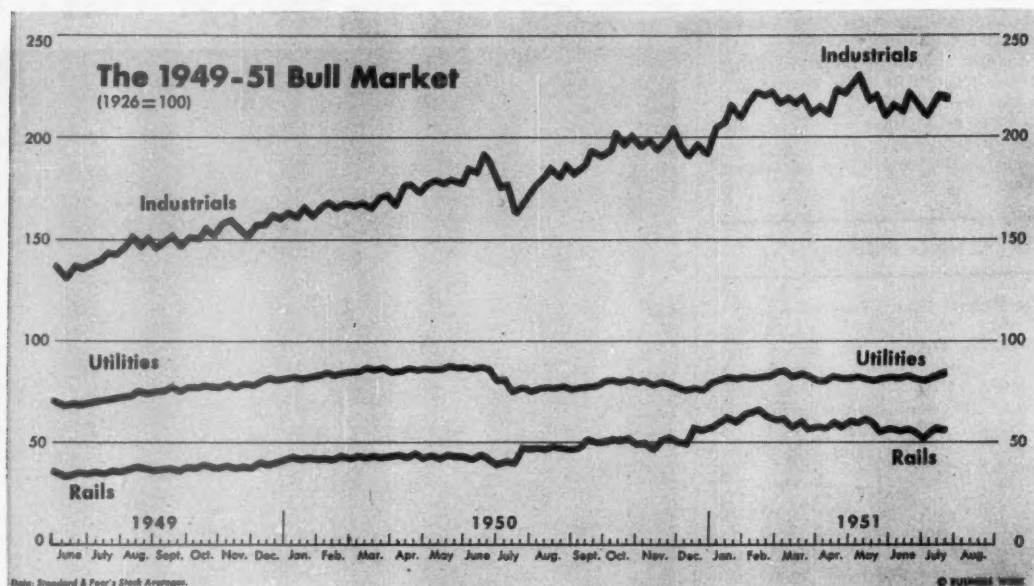
(Please attach to, or write on, your business letterhead.)

BW-7-21

LOOK FOR THE WATERMARK

IT IS HAMMERMILL'S WORD OF HONOR TO THE PUBLIC

FINANCE



Picture of a Puzzled Market

Short-term effects of peace split bulls and bears, as uncertainties bring moderate decline and wait-and-see attitude.

Over the long term, peace is bullish in the stock market; war is just the opposite. Everyone in the market knows that, realizes that "war" profits are ephemeral. Any market chart will show how poorly stocks behaved during the two World Wars—until firm hopes of victory and peace restored confidence.

The reason for this pattern is clear: Stocks are not an adequate hedge against inflation in wartime. Controls and shortages bring a greater destruction of values than even the smartest market operations could offset. Ceilings on profits hold down dividends.

• **Decline**—Since war is bearish, peace bullish, why has the market been behaving so peculiarly since the first rumors of peace in Korea? Why have stock prices been declining so much of the time (chart)?

The answer is easy—and tells you a lot about today's market. Any change—even the threat of change—in the factors underlying the national economy inevitably injects uncertainty into the business outlook, on a short-term basis. Faced with change, many investors and traders make a quick decision to cut their holdings. They want sideline seats until the uncertainties clear up.

So far, this tendency has not touched

off a wholesale dumping of stocks. Declines had been orderly up to early this week. Only the rail shares had taken what might be called real punishment. Standard & Poor's rail stock index has dropped back to near its 1950 yearend level, after having been some 20% higher a few months ago. Utility and industrial stocks, on the other hand, have kept about half of the 7% to 14% gains they chalked up early in 1951.

What Wall Street wants to know now is this: What will the market do in the next few months, if the shooting really stops in Korea?

• **Optimists**—One big group of Wall Street experts thinks the market has already pretty well discounted the uncertainties born of the Korea peace moves. They don't expect prices to work a great deal lower if some sort of peace is actually achieved. But they would not be surprised by erratic price movements and considerable choosiness by investors in the next couple of months.

By fall they expect the 1949-51 bull market to burst into bloom again. As they see it, the bulk of the armament program has not yet been felt by the economy. Corporate capital spending will be high for some time. These bull-

ish thinkers add these factors together and arrive at a forecast of record demand for consumer goods and strong inflationary pressures, rather than of recession.

• **Profits**—This group isn't worried about the size of this year's corporate earnings and dividends. They feel that events in Korea are likely to result in much lighter tax boosts than seemed possible earlier in the year. They don't think that profits as a whole will sag alarmingly from their early spectacular levels.

On top of this, the optimists believe that dividend rates would remain generally the same, even if 1951 profits should fall as much as 15%—which they do not expect. They point out that in recent years much less than half of earnings has been passed out as dividends. This provides a cushioning factor.

• **"Cheap" Stocks**—The optimists think that stocks are "cheap" now, despite the fact that the market as a whole is at levels never reached since the roaring 1920's. Perhaps they are right; by the time-honored measure of earnings and yield, prices appear very attractive.

For example, the Dow-Jones industrial average shows earnings close to \$34, with the shares selling at only 7.5 times that figure. Judged by precedent, that's not a dangerous figure. Before the 1937 break started, the figure was

16.9. It had soared to 22.7 before the 1942-1946 bull market burst at the seams.

The comparison is just as favorable if you stack up the yields now shown on the Dow-Jones industrial average against those in the same two earlier bull markets. In May, 1946, the figure was 3.23%; in March, 1937, it was 3.71%. Lately, the figure has been up to 6.45%. Moreover, the current yield is some 3.4% higher than is obtainable from high-grade bonds. In the earlier years the differential in favor of stocks shrank to as little as 0.5%.

• **Pessimists**—For every optimist who is swayed by the foregoing figures, you will find an equally smart pessimist who takes a glum view of prospects for the next few months. And they have some convincing arguments of their own.

Heavy inventories bother them particularly. After Korea broke out, business and individuals alike bought madly to protect themselves against expected war shortages. Most of them bought far beyond their normal needs for some time to come. This boosted production in many lines way above the levels of real consumption.

The shortages haven't materialized yet. If peace does come in Korea, it will catch important segments of the economy overloaded with high-cost goods at a time when sales are likely to contract. Already, many consumers and businessmen have stopped buying and started using up inventories. Peace in Korea would probably intensify this ship-trimming process.

• **Armament**—To be sure, the armament program will continue no matter what happens in Korea; that will insure continued high business activity. However, much of the post-Korea rise in stock prices has been due to inflation fears. A cease-fire would take much of the steam out of the current "war fears" boom. That would be particularly true if further price cutting were used to pare down inventories.

The pessimists do not consider the armament program an unmixed blessing, particularly so far as corporate earnings are concerned.

Government contracts, quite properly, always produce lower profit margins than regular lines. The senior right of armament makers to materials creates expensive problems for non-defense lines. Production of consumer durable goods and residential and commercial building will drop off this year due to material shortages.

• **Earnings**—As a result, many individual profits are likely to be off sharply this year, even if the over-all earnings stay high. In these days of high operating costs and taxes, it takes high volume to keep your profits on an even keel, much less to boost them.

Monsanto Chemical has just re-

*Patterns in
Pensions*

YOUR RETIREMENT PROGRAM

SHOULD BE GEARED TO YOUR COMPANY EARNINGS

IF your company

EARNINGS ARE STEADY

Your company probably can afford the permanent commitment of an adequate pension system.

IF your company

EARNINGS ARE ERRATIC

Your company probably can best solve the retirement problem through a deferred profit-sharing trust—or a combination of a modest fixed pension commitment plus a profit-sharing retirement plan.

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clues

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ported second-quarter sales up \$18-million over 1950. Yet net profits dropped off \$800,000 to less than \$6.5-million. Du Pont's newly released first-half report shows sales up \$190-million. But earnings from its own operations showed only \$1.68 on its common stock, compared with \$1.96 the year before.

It will be some time before it will be clear whether bulls or bears are correct in their reasoning. At the moment the bears seem to have the edge. Most stocks today are selling well below their 1951 highs, despite occasional bursts of strength in the market.

Virginia Cuts Taxes Another Five Percent

Virginians get a 20% cut in their state income tax this coming year—and part of it is more or less by courtesy of Philip Morris & Co. Ltd., Inc. Taxpayers knew that they were due for a 15% drop in personal and corporate income taxes (BW—Jul. 7 '51, p130). Here's how the extra 5% came about:

An unusual income tax law passed last year provides that if the state's general fund reaches \$103-million by June 30, the end of the fiscal year, the state income tax for the next fiscal year will be cut 15%. If the general fund goes to \$105-million, the cut will be 20%.

• **Happy to Pay**—As the fiscal year was ending, officials of Philip Morris found that the general fund would probably go over \$105-million if they paid their \$520,000 income tax early. The company didn't have to pay until the end of July. But by paying a month early, the tobacco company stood to increase its tax saving from \$75,000 to \$100,000 for the next fiscal year. And that's what happened.

Virginia tax officials say they collected about \$50-million in state income tax during the 1951 fiscal year. So the 20% cut will save taxpayers \$10-million in the coming year.

The income tax law that provides these cuts was sponsored by state senator Harry F. Byrd, Jr., as a protest against bad financial guesswork by state officials. For 12 years state budget directors had underestimated tax revenues.

The Pictures—Cover by Dick Wolters. Acme—24 (bot.); Frank Associates—88; Harris & Ewing—32; Hendrich-Blessing—92, 93; Keystone—37 (bot.); Ed Nano—52; Robert Yarnall Richie—40; Wide World—24 (top), 36, 37, (top), 48 (top ctr.); Dick Wolters—33.

FINANCE BRIEFS

E-bond redemptions continue to run above new sales. The difference was \$117-million in June, according to the Treasury, \$130-million in May. In the first half, payouts topped new sales by more than \$500-million.

Marketable government bonds are steadying. In its refund offer to holders of \$5.4-billion in notes, maturing Aug. 1, the Treasury is offering 1½% 11-month certificates. A month ago it offered 1½% certificates running for 9½ months, to refund a similar issue.

New York banks charged an average rate of 2.76% in the second quarter on loans due within a year, says the Federal Reserve Bank of New York. This compares with 2.34% a year ago. It's the highest short-term loan rate since the 1930's.

Mother Bell doesn't expect to raise any money for some time, though the system is spending \$1-billion a year on expansion. That's the word from new AT&T president Cleo F. Craig.

Kaiser-Frazer is trying to impound assets of Otis & Co. in order to carry out the \$2.6-million judgment it just got against Otis (BW—Jul. 7 '51, p21). Meanwhile, Otis has appealed and also has a countersuit against K-F on the calendar in Cincinnati federal court.

TV troubles: Motorola, Inc.'s second-quarter sales were \$25.5-million, off 27% from the same 1950 quarter, according to president Paul Galvin.

The last capital stock owned by the U.S. in the federal home loan banks has just been retired. The banks are now entirely owned by their 4,000 members, mostly savings and loan associations.

Interstate Commerce Commission has O.K.'d a new plan for Atlantic Coast Line R.R. to acquire the bankrupt Florida East Coast R.R. Earlier attempts by ACL to take over have been blocked in the courts.

Aetna Life Insurance Co. passed the \$10-billion mark of insurance in force during the first half of 1951, according to president Morgan B. Brainard. Aetna joins six other life companies that have over \$10-billion insurance in force.

Metropolitan Life, biggest life insurance company in the world, has followed other companies into the disaster medical insurance field (BW—Jun. 23 '51, p139).



Steel saved civilization at Vienna

MODERN history begins with the record of conflict between Christians and Moslems--six centuries of wars that opened with the Crusades and saw the Turks capture Constantinople in 1453.

More than 100,000 Turkish janizaries and cavalry besieged Vienna in 1683. For two months, to quote the diary of an eye witness, "The enemy continued playing their cannon and granadoes. But the city walls were strong, Christian cannon were bigger and more numerous and ammunition more plentiful." Finally came a day when the officer's journal reported, "The enemy did not play their cannon so fast. It was confirmed that they had no great provision of bullets, inasmuch as they shot back not only our bullets, but also pummels of swords and all sorts of iron and stones."

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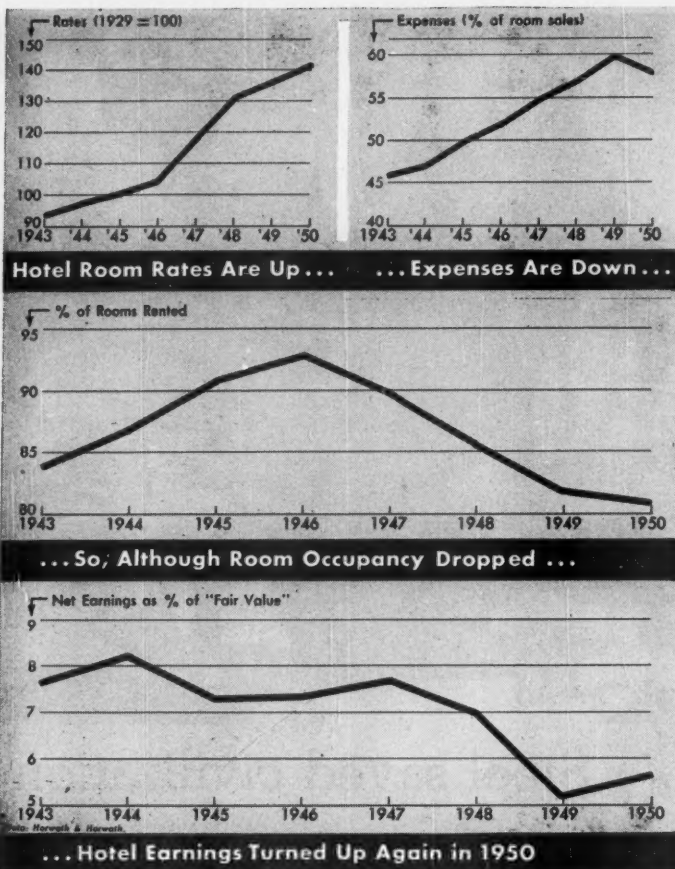
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Room Clerks Aren't So Busy

Hotel men came out pretty well last year, by dint of cutting costs and boosting rates. The outlook for 1951 isn't so good, however: Motels are undermining the transient trade.

Hotels did a pretty good job of handling their costs in 1950, in spite of inflation. Though they rented fewer rooms, they were able to boost rates enough to increase earnings on their "fair value." This reversed a trend that had been going on since 1947 (charts).

That's the cheery picture hotel men were getting this week from Hotel Operations in 1950, the annual review of hotel finances by Horwath & Horwath, industry accountants. The report covers in detail the operations of 100 U.S. hotels, located in 51 cities. The selected 100 do nearly 10% of U.S. hotel business.

Since book valuations of hotels differ so widely, H&H has worked out an arbitrary standard of "fair value." It multiplies a hotel's real estate taxes by

40, then adds present value of furniture and equipment.

• **Bleak Times Ahead**—But the outlook for 1951 isn't so good. The all-important room occupancy ratio is continuing down, just as it has ever since 1945. That's a very bad sign, because rooms are the major commodity hotels have to sell. The only way they can make up for lost revenue is to cut costs and raise rates. Under price control there's a limit to how much of this they can do.

Furthermore, the 1950 study shows that, although H&H's 100 selected hotels earned more than in 1949, the gain was limited to transient hotels with 500 rooms or more, and to residential hotels. The smaller transient hotels fared worse than in 1949. As a whole, the group cut food costs per food sales

dollar. Repairs, maintenance, and improvements were reduced sharply—something that could boomerang later.

• **Motels Take Over**—The drop in hotel room occupancy has come with the rise of the "motel." According to one estimate, motels increased from about 13,500 in 1939 to 30,000 in 1950. That's because more Americans are traveling by car. To the auto tourist, motels are usually more convenient—and often cheaper—than city hotels.

• **All Over the Country**—To find out the current outlook for hotels, BUSINESS WEEK asked some hotels in representative cities how they are doing. Working from West to East, here's the picture:

Los Angeles: Hotel business during the first five months of 1951 was the worst since the depression. It's improving now, thanks to summer tourists. Hotel men talk about a "barrage of smog publicity," from which they say Los Angeles has suffered during the past few years.

San Francisco: Except for the six "Class A" hotels that get first grab at convention business, all hotels here were off appreciably this year till the end of April. The Class A hotels had about 87% occupancy in June, off only slightly from last year. Some Class B hotels had less than 60% occupancy.

Dallas: Room occupancy at the end of June was running about 84%, compared to 88% last year. Dallas expects some good convention business, but reports that liquor sales, a good profit earner, are off 12% from last year.

Chicago: Room occupancy ratios through May were about the same as last year. Summer business will depend largely on tourists. Mourns one hotel man: "People don't go to summer conventions the way they used to."

Cleveland: Room occupancy during the first half was 10% below the same 1950 period. Room rates are up 10%. Restaurant sales are up, generally.

New York: Business has been good. Total sales in June were up 10% from last year, and room rates are up about 11%. But room occupancy continues to drop. In transient hotels, it was running about 82% at midyear, compared to 83% the year before. In residential hotels, it dropped from 91% to 90%.

Boston: Business this year has been fair to good, but a drop is expected during the summer because of Boston's location at the edge of New England's vacation land.

• **Earnings' Minor Slump**—Hotel shares have been reflecting this slump in hotel business. This week the stocks of major hotel chains like Hotels Statler, Inc., Hilton Hotels Corp., and Knott Hotels Corp. were selling near their 1951 lows. March-quarter earnings of Knott and Hilton showed lower profits than during the same 1950 period. Statler publishes no interim figures.

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THE MARKETS

COMMODITIES: INFLATION HAS PARTLY WORN OFF

	Postwar High Before Korea	Eve of Korea	Korea High	Latest Price
Burlap (yd.)	\$.224	\$.164	\$.34	\$.29½
Cocoa (lb.)	.51	.32½	.428	.35
Coffee (lb.)	.51	.48½	.56½	.53½
Copper (lb.)	.23½	.22½	.24½	.24½
Corn (bu.)	2.80	1.51	1.83	1.71
Cotton (lb.)	.364	.338	.452	.43
Cottonseed oil (lb.)	.35½	.154	.267	.175
Hides (lb.)	.36½	.258	.435	.365
Hogs (cwt.)	31.20	20.25	25.50	23.52½
Lard (lb.)	.29	.109	.198	.163
Lead (lb.)	.21½	.11½	.17	.17
Print cloth (yd.)	.282	.152	.24	.173
Rubber (lb.)	.34	.282	.79	.52
Steel scrap (ton)	41.75	37.50	45.00	42.50
Steers (cwt.)	36.62½	29.25	37.87½	35.25
Sugar (lb.)	.061	.058	.068	.064
Tallow (lb.)	.27¼	.048	.182	.108
Tin (lb.)	1.03	.764	1.83	1.06
Wheat (bu.)	3.11½	2.11¼	2.52	2.29
Wool (lb.)	2.06	2.00	4.14½	2.49½
Zinc (lb.)	.18	.15	.175	.175

Data: Bureau of Labor Statistics.

Speculative Fever Dies Out

Commodities feel own deflation, largely as a reaction to earlier overbuying. But despite losses in last few months, all of them are still above the levels of just before Korea.

Commodity prices, except for metals and meat, have been having their own deflation (table). It's not all due to peace talk, by any means. The downward trend in commodity prices has been going on since early this year (BW—Jun.23'51,p144). Though none of the representative commodities shown above have fallen back to their pre-Korean level, most of them have declined quite a bit in the last few months.

• **Rush to Buy**—After fighting started in Korea, there was hectic buying of commodities by speculators, investors, businessmen, and consumers. Speculators figured prices would go higher; they bought to sell at a profit later on. Some investors bought commodities as a hedge against inflation. Businessmen bought to avoid paying higher prices for their materials later and to keep production going. Housewives rushed to stock up on items like coffee, sugar,

and soap that had been scarce in World War II.

After a while the emotional atmosphere changed. Total war no longer seemed to be an immediate possibility. Military demand was slow in getting under way. By the time it became apparent that the pattern of World War II was not going to repeat itself, businessmen and consumers held heavy inventories. That naturally has made consumers less eager to buy and businessmen more eager to sell, even though in the long run their original fears of shortages might prove well-founded.

• **High Demand**—This hasn't applied to copper, lead, and zinc, for which there is plenty of demand. But official prices for these commodities have never climbed out of sight, because smelters have held the line in keeping down prices to the trade. That hasn't kept these metals from being resold later

at much higher prices. The same thing applies to steel scrap.

The table shows that tin is off quite a bit from its Korean high. That isn't because there is less demand, but because the government has taken over U.S. buying of tin, through the Reconstruction Finance Corp., and now regulates the price. The same thing is true of rubber, although here there also is increasing competition from synthetic rubber.

• **Big Crops**—Most of the deflation has taken place in farm commodities. It's a simple case of supply and demand. Crops were relatively short last year. The big jump in prices encouraged higher production. This year big crops of cotton, corn, and wheat are coming

to market. That not only depresses prices for these commodities, but affects cottonseed oil, a cotton byproduct, hogs, which eat corn, and lard—which comes from hogs and is competitive with cottonseed oil.

This doesn't mean hog prices are down much. But they certainly would have been higher if it hadn't been for the estimates of a big corn crop. Steers, of course, are selling right at ceiling prices. But even they could be affected by the big run of steers to the yards this week.

You can see a big drop in the price of wool from its Korean high. If there is going to be no more shooting, armies are going to require less wool for uniforms.

Preferred Stocks Move Up in Wake of Bonds

Preferred stocks have been perk-ing up a bit lately, tagging along as usual after bond prices.

Preferred shares, with the dividends firmly limited, are almost as much a "fixed interest" security as are bonds. Hence the group's traditional following of bond trends. It's going on now, as the preferreds reflect the firmer tone that has been creeping into government and corporate bonds in the last few weeks.

Wall Streeters expect the better tone to continue in Treasury and corporate bonds. If they're right, you can expect some further upward movement in preferreds. But nothing dynamic is anticipated anyway.

Here's a sampling of the 1951 price action of a group of representative preferreds. It shows that most of them, despite recent gains, are far below their earlier highs for 1951.

Preferred Stock Issue	1951		Date	1951		Date	Recent Price	% Rally from 1951 Low
	High	Low		Low	Price			
Allied Stores 4%.....	\$101.00	Feb. 9	\$91.50	Jul. 3	\$93.00	1.6%		
Allis-Chalmers 3½%.....	100.00	Jan. 11	89.25	Jun. 29	91.75	2.8		
American Can 7%.....	185.00	Jan. 19	167.50	Jun. 28	170.50	1.8		
American Smelting & Refining 7%.....	167.00	Jan. 9	149.00	Apr. 23	154.25	3.5		
American Tobacco 6%.....	154.00	Jan. 16	134.00	Jun. 14	137.25	2.4		
Atchison, Topeka & Santa Fe 5%.....	115.87	Feb. 8	105.50	Jul. 13	105.00	-0.5		
Atlantic Refining 3½%.....	105.50	Jan. 17	92.50	Jun. 25	96.25	4.1		
Atlas Powder 4%.....	119.00	Jan. 3	110.00	Mar. 15	111.25	1.1		
Bethlehem Steel 7%.....	155.75	Feb. 16	144.25	Jul. 13	144.25		
Bristol-Myers 3½%.....	105.75	Jan. 17	94.25	May 25	95.75*	1.6		
Chesapeake & Ohio 3½%.....	90.50	Jan. 2	80.00	Apr. 27	81.25*	1.6		
Colgate-Palmolive-Peet \$3.50.....	100.50	Feb. 5	87.50	Jun. 29	90.00	2.9		
Consolidated G., E. L. & P. 4½%.....	115.00	Feb. 3	106.87	Jul. 3	109.00	2.0		
Consumer Power 4½%.....	113.00	Mar. 2	104.75	Apr. 23	108.12	3.2		
Container Corp. 4%.....	106.25	Jan. 16	100.00	Apr. 23	101.00	1.0		
Continental Can \$3.75.....	106.00	Jan. 9	92.75	Jun. 28	95.25	2.7		
Corn Products 7%.....	186.00	Jan. 23	166.25	May 17	170.25*	2.4		
Crown Zellerbach \$4.20.....	106.00	Jan. 31	100.00	Jun. 28	101.50	1.5		
Dow Chemical \$4.....	111.12	Feb. 2	101.00	Jun. 28	103.00	2.0		
Eastman Kodak 6%.....	182.00	Jan. 11	160.00	Jun. 29	165.00	3.1		
Food Machinery 3½%.....	102.00	Jan. 15	93.50	Apr. 6	101.00	8.0		
International Harvester 7%.....	179.00	Jan. 31	159.25	Jun. 26	163.00	2.4		
Island Creek Coal \$6.....	139.00	Feb. 7	129.00	Jul. 12	130.00	0.8		
Liggett & Myers Tobacco 7%.....	184.00	Jan. 23	162.00	Jun. 27	165.50	2.2		
May Dept. Stores 3½%.....	101.50	Feb. 21	87.00	Jan. 29	93.50	7.5		
Merck & Co. 3½%.....	101.00	Jan. 12	88.50	Apr. 10	93.00*	5.1		
National Biscuit 7%.....	184.75	Jan. 20	164.00	Jun. 26	169.00	3.0		
National Lead 7%.....	185.50	Jan. 4	169.00	Jun. 29	172.75	2.2		
R. J. Reynolds Tobacco 3.60%.....	98.50	Jan. 23	86.00	Jun. 27	88.25	2.6		
E. R. Squibb \$4.....	109.25	Jan. 30	100.00	Jun. 15	101.25	1.3		
Standard Brands \$3.50.....	96.00	Mar. 1	87.00	May 22	88.62	1.9		
Sylvania Electric Products \$4.....	95.50	Mar. 1	86.00	Jan. 2	89.50	4.1		
Union Pacific \$2.....	52.00	Feb. 2	48.00	May 19	48.00		
U. S. Gypsum 7%.....	185.00	Jan. 26	171.50	May 29	173.00*	0.9		
U. S. Rubber 8%.....	142.50	Feb. 19	128.75	Jul. 2	130.25	1.2		
U. S. Steel 7%.....	153.75	Jan. 19	141.50	Jun. 12	142.75	0.9		

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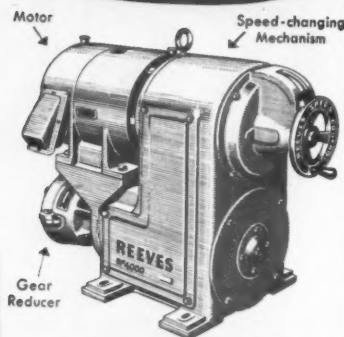
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DEFENSE BUSINESS

Metal Supply to Ease by '54

Defense Minerals Administration's expansion program will gradually cure many shortages, but outlook remains black for copper, tungsten, cobalt.

Businessmen can now get a fair idea of what the raw metals supply will be for the next two or three years: Copper, tungsten, and cobalt will stay scarce for years to come. Other minerals will be in fairly comfortable shape by the end of 1953. By that time, the expansion program that Defense Minerals Administration is pushing will be paying off.

DMA's program now consists of about 140 additions to plants and 48 projects for minerals exploration. The plant expansions have been approved for quick tax amortization, and the exploration is getting federal help. Other projects will be up for O.K. in the next few months.

• **The Military**—Whether this expansion will be enough to balance demand will depend on what happens to the military program. If the Army starts cutting back orders, the heat will be taken off scarce metals faster than the DMA schedule. A swing the other way—as in the proposed jump from 95 to 150 Air Force groups—would mean all bets are off.

• **Roundup**—Assuming there are no major changes in the military program, here is how DMA sizes things up:

Iron ore. Supplies will fall 6% short of demand by the end of 1953, even figuring on 10-million tons of imports and some production from taconite. But the steel industry has a way of coming up with raw material for its furnaces in time of need. DMA doesn't expect the tightness of iron ore to cause any actual cutback in steel.

Aluminum. Production will equal demand well within the target date, DMA believes. If there's any breakdown, additional expansion of magnesium facilities might be the answer. Magnesium meets foreseeable demand.

Titanium. There will be a whopping deficit by end-1953. If DMA has it figured right, only about 15% of demand will be met. But the very presence of this new metal on the materials list is a hopeful sign. It can, for example, be substituted for nickel in many military uses.

DMA uses the current price of \$5 a pound for sponge metal as the basis for estimating 1953 demand. If the new process developed for the Navy actually

cuts the price to anywhere near the announced \$1 a pound, use will skyrocket (BW—Jul. 7 '51, p20). Both the U.S. and Canada have abundant ore, so any shortage at the end of 1953 need be only temporary while new processing plants are built.

Nickel and molybdenum. Production is expected to reach the present level of demand before 1953 ends. DMA had O.K.'d projects to increase molybdenum output by 8-million lb. per year. International Nickel has already boosted production by 12-million lb. per year, and further nickel expansion is in the works. Both metals will be used increasingly as substitutes for scarcer ones. By end-1953, both should be plentiful by present standards.

Manganese. No shortage is expected. It has been plentiful, due to sustained imports, and DMA has high hopes for increasing supplies from slag.

Zinc. Approved projects will increase output by 90,000 tons a year. By end-1953, supply will equal 1951 demand.

Lead. Supply by the target date will lack less than 1% of being in balance with demand. Expansion already approved will provide 35,000 additional tons each year.

Chrom. More stringent controls may be needed. They're being debated in mobilization circles. But DMA believes imports can be stepped up to meet foreseeable demand by end-1953.

Sulfur. Supply will be only 3% short of demand if projects proposed by DMA are approved and then produce as expected. DMA wants expansion of 1-million long tons, of which 700,000 tons have been approved by higher agencies.

Tin. This metal is in a class of its own. The government—sole buyer in the U.S.—can get all it wants, at a price. Since March it has been out of the market, in order to drive the price down. Meanwhile, the government smelter in Texas was producing enough for current use and probably a little for the stockpile.

Our biggest source of raw tin has been Bolivia, but our contract there ran out May 31. If a new Bolivian agreement is reached soon, the government can indefinitely continue its fight against world prices. If not, we'll sim-

ply have to pay somebody else's price again.

Copper. Along with tungsten, copper heads the bad-news list, despite production increases. DMA has approved projects to turn out 139,000 additional tons of copper. But the best it looks for by the end of 1953 is a 5% rise in domestic output. Even with imports, supplies still will fall 15% short of demand.

Tungsten. DMA reported an impressive increase of 89% in production last May. But production was low a year ago. The increase, therefore, was only a small part of our needs, which are met largely by imports. DMA sees nothing on the production side, either in this country or abroad, which can close the gap created by mobilization.

Cobalt. This metal is in the same class as tungsten—so far short of world needs that DMA doesn't even try to measure it. It will remain so far behind that the only relief appears to lie in designing it out of products, as the TV industry is doing.

Fixed-Price Contracts Get Built-In Incentive

Businessmen have been wondering what happened to the incentive contracts that helped to cut the costs of new weapons in World War II. By their terms, an efficient contractor got a share of every dollar he saved on government orders.

• **Redetermination Instead**—This time incentive contracts are few and far between. That's because the Pentagon has discovered it can get the same action with fixed-price contracts that call for price redetermination. And less money has to be earmarked than under an incentive contract.

The incentive-type contract worked best on new weapons where little was known about costs. The government would set a maximum price. If the contractor could drive costs below the maximum, he got a share of the saving. Sometimes, he managed to get the target price set so high that a saving was a virtual sure thing.

Because of that, the Pentagon turned to fixed-price contracts for the present rearming. This time there's a vastly greater accumulation of data on costs, even for new weapons, than in World War II. As a result, it's easier to set reasonable prices. The reason for permitting price redetermination is not so much unknown factors, as the known fact that costs are constantly rising.

• **Incentives**—The new contract really does the incentive job in its own way. A fixed price is set. But when the contract is 30% to 40% complete, it comes up for redetermination. Revision can



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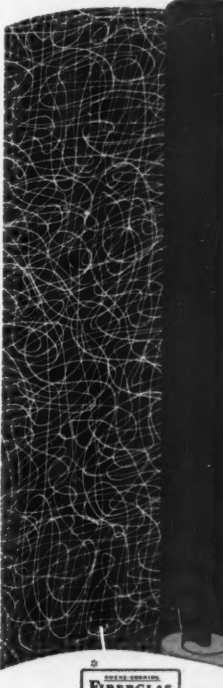

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Rubber Rules Eased

Hundreds of smallish rubber companies—as well as everybody buying a new car—will benefit from National Production Authority's latest relaxations of rubber restrictions.

- Under pressure from Sen. Gillette's small business subcommittee, NPA has exempted from controls all companies that use less than 150,000 lb. of rubber per quarter. The old limit was 25,000 lb. per quarter. The ruling affects about 679 companies, over two-thirds of all rubber processors. But the over-all effect will be slight. The companies use only 5% of our 100,000-ton-a-month consumption.

- NPA also lifted its April ban on fifth, or spare, tires for new cars. But makers of heavy-duty truck and tractor tires were ordered to continue producing the 35,000 extra tires a week, which came as a result of the spare-tire cutback.

DEFENSE BUSINESS BRIEFS

Packaging machinery makers told NPA that bearings, electric motors, and switches top their list of components shortages. There's one bright spot: Small quantities of stainless steel can be obtained without difficulty.

- The shortage of tin for cans will throw extra demand on paper food-carton makers, NPA was warned. Carton makers want an end to the pulp limitation that holds them to 95% of their 1950 rate of use. To support their claim, they point to this year's big food crops and the increase in frozen foods.

- Steel preview: Fourth-quarter allotments may be down. The favored freight car building program gives the hint. Its steel will provide 28,500 cars, not the 30,000 posted earlier by mobilization bosses.

- Proposed changes in orders directing steel to warehouses will not change amounts except for a cut in steels

coated with zinc, NPA announced. NPA order M-6 now assures warehouses a minimum of 85% of the amount of steel they handled during the January-September, 1950, base period.

Railroads won a cheer from NPA for breaking up 336 locomotives in a single month, producing 6,553 tons of scrap.

One national plumbing code to replace present 1,600 codes has been proposed jointly by NPA and the U.S. Housing and Home Finance Agency. The purpose: to save scarce materials. Present codes call for 700 cast iron pipe items, for example. The proposed national code would cut the number to 300.

Diamond grinding wheels would be prohibited in a number of civilian uses under an order being considered by NPA. The chief use of diamond wheels—on carbide tools—would not be affected.

Blimp boom: Goodyear Aircraft Corp. will build at least four more N-type airships for the Navy. The first of the N's—the largest nonrigid airship ever built—is now undergoing preacceptance tests. It cost \$5-million; later ships will probably be considerably cheaper.

Another procurement clinic will open in Cleveland July 24, run for four days. Small businessmen will get coaching in securing Armed Forces subcontracts.

CHECKLIST:

Defense Regulations

The following listing and condensed description cover all the material and price-control regulations issued by the defense agencies during the preceding week.

Full texts of the materials orders may be obtained from National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Materials Orders

Construction: Authorizes eight government agencies to process applications for permission to commence construction by permitting them to operate under provisions of the NPA Controlled Materials Plan. Del. 14 as amended (July 11).

CMP: Amends basic regulation to emphasize that manufacturers and others who receive authorized produc-

Steel Scrap is Very Scarce!



You have given your sons to the Armed Forces

You have devoted your plants to the defense effort



You have joined Civilian Defense

You have bought Defense Bonds...given your blood



Now...will you turn in your scrap?

Without vital scrap, the steel so desperately needed cannot be made.

Round up your scrap — call in your scrap dealer TODAY!



The Colorado Fuel & Iron Corporation



AMERICAN WIRE FABRICS CORPORATION, Mt. Wolf, Pa.
CLAYMONT STEEL CORPORATION, Claymont, Del.
THE CALIFORNIA WIRE CLOTH CORPORATION, Oakland, Calif.
WICKWIRE SPENCER STEEL DIVISION, New York, N.Y.


Cincinnati is famous for
its Magnificently Modern
PLAZA
hotels



Owned and Operated by
 Thomas Emery's Sons Inc.
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Internationally Famous

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ON THE SPOT SERVICE

Whenever you need personal, on-the-spot adhesive service, write or phone your nearby Fuller plant (see below). A Fuller trouble-shooter will call on you, as fast as he can. He is trained to help you solve your adhesive problems. Call Fuller!

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ADHESIVES FOR INDUSTRY
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tion schedules and related allotments of controlled materials may not purchase additional materials of any kind to augment their output of items for which allotments have been made. CMP Reg. 1, Amend. 1 (July 12). Amends regulation to extend to all small users of steel, copper, and aluminum the benefits of CMP allotments of the three controlled materials. CMP Reg. 1, Dir. 1 as amended (July 12).

Copper: Permits only copper refiners and scrap dealers to accept delivery of copper raw materials of certain types without specific NPA authorization after Aug. 1. M-16 as amended (July 13). Excludes the use of copper in automotive component parts from M-12 and places its regulation under M-68. M-12 as amended (July 17).

Pricing Orders

Pig iron producers: Permits producers of pig iron who use foreign iron ore and sell their products on long-term contracts with escalator clauses to apply for ceiling price adjustments. GCPR, Suppl. Reg. 38 (effective July 12).

Grocery shipments by water: Permits food handlers to include all costs incidental to shipment by water in computing their ceiling prices, except costs of loading at the processing plant and

unloading at consignee's warehouse. CPR 14, Amend. 4; CPR 15, Amend. 5; CPR 16, Amend. 4 (effective July 18).

Agricultural commodities: Clarifies and amends certain provisions of the manufacturer's pricing regulation affecting the manufacture of food products. CPR 22, Amend. 16 (effective July 17).

Restaurants: Permits eating establishments that consider the base-period food cost ratio unrepresentative of operations between the base period and Apr. 1, 1951, to apply for adjustments. CPR 11, Amend. 3 (effective July 18). Delegates authority to OPS regional directors to act on all applications for price action and adjustment by restaurants. Del. 13 (effective July 18).

Machine tools: Provides adjustments in ceiling prices on an over-all basis or for a particular machine tool without regard to the applicability of any other OPS regulation. GOR 15 (effective July 16).

Imports: Indefinitely extends the compulsory effective date of the import order for sellers who had not filed their margins by June 30. CPR 31, Amend. 5 (effective July 13).

Puerto Rico: Delegates authority to the director of the OPS office in Puerto Rico to revise ceiling prices on Puerto Rican needlework. Del. 7, Suppl. 2 (effective July 14).



New Army Truck Does Everything But Fly

GMC Truck & Coach Division this week unveiled a new 6 x 6 truck designed to be the Army's standard workhorse. This M-135 replaces a model used in World War II, when GMC built 500,000 units.

Features of the new model are Hydramatic transmission and automatic front-wheel drive. In normal driving, the front axle runs free; in tough going, power is

automatically applied to it, too. With a 145-hp. engine and power to all six wheels, the truck can climb a 60% grade.

The M-135 is also sealed and equipped with a snorkel for submerging in crossing streams. Its low-pressure flotation tires allow it to cross sand and bogs. On the level it can carry a five-ton payload at up to 58 mph. and can tow another five tons.

Time-and-a-half, for half a girl?

Don't blame the girl; blame the *system*!
Faulty business forms force *any* girl to waste half her
time on needless paperwork. She works full time,
even overtime—but as far as *producing* goes,
she's only half a girl.

How different with Uarco business forms!
She wastes no time on carbon stuffing . . . carbons
come *pre-set*. She wastes no time between typings . . .
forms feed themselves into the machine.
Realigning? None! Recopying? No. Uarco *combines*
forms so that one serves all concerned—
distribution is fully controlled!

Hard to believe? You can *see* it work . . . just call
your Uarco Representative. He'll make a
complete survey of your needs, without cost or
obligation. Then you'll see how every girl becomes
a *productive* girl—almost a girl-and-a-half!

Factories: Chicago; Cleveland; Oakland;
Deep River, Connecticut; Watseka, Ill.
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Business Forms



Send for these time and money saving forms

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Please send me, without charge, your large portfolio
of samples of UARCO waste-cutting business forms.

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Company

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RIDING ON AIR...

The early horseless carriage was shod with airless hard rubber or oversized bike tires . . . far cry from today's earth-moving pneumatics . . . that stand over 8 feet high, weigh over 3,000 lbs. and carry 20-ton loads at 25 mph.

Yet these king-size pneumatics are but a pint-size portion of America's tire production. Tires by the billion . . . for everything from wheelbarrows to 14-wheel trailer trucks . . . have put commerce, industry and the public on wheels.

NOT RESTING ON LAURELS...

For centuries, rubber was a sticky, unmanageable plaything of the Indians. But botanists, scientists, chemists, engineers, physicists . . . with typical American thoroughness . . . tamed rubber . . . built the first pneumatic tires . . . went on to make them withstand oil, heat, pressure, friction. Now, blowouts and punctures are being conquered.

AMERICA WORKS THAT WAY...

Better tires have brought faster transportation, via land and air, better highways, easier farming, quicker construction . . . a better standard of living for everyone.

America can work like that because it has an all-seeing, all-hearing and reporting Inter-Communications System.

THE AMERICAN INTER-COM SYSTEM...

Complete communication is the function, is the unique contribution of the American business press . . . a great group of specially edited magazines devoted to the specialized work areas of men who want to manage better, design better, manufacture better, research better, sell better.

And it is reassuring, in the light of today's production requirements and problems, to know that: *No country in the world has a business press that can compare in size, character, or ability to serve, with that of America . . .*

WHY WE HAPPEN TO KNOW...

The McGraw-Hill business publications are a part of this American Inter-Com System. As publishers, we know the consuming insistence of editors on analyzing, interpreting, reporting . . . on developing universal acceptance of new ideas . . . on making sure that specialized information reaches interested people quickly and regularly.

As publishers, we know that people pay to subscribe to our business publications for the sole purpose of listening in on units of the American Inter-Com System.

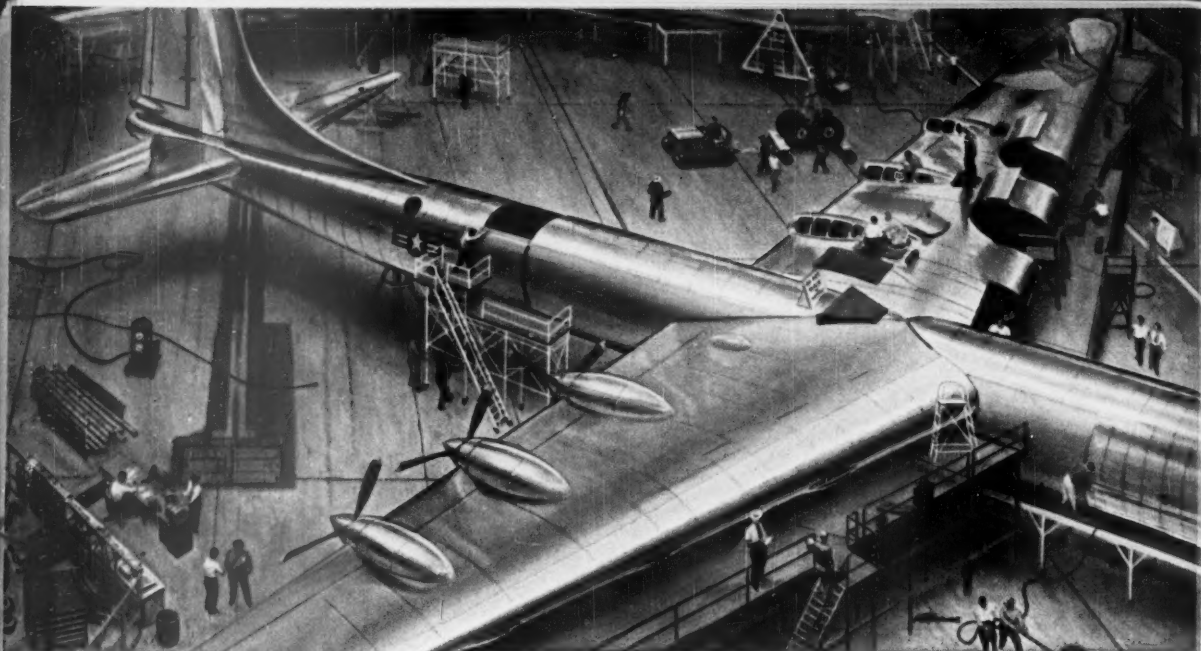
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HEADQUARTERS FOR BUSINESS INFORMATION





The jet assisted Convair B-36D, world's largest warplane—wingspread 230 feet.

...for a Wingspread as wide as the Free World!

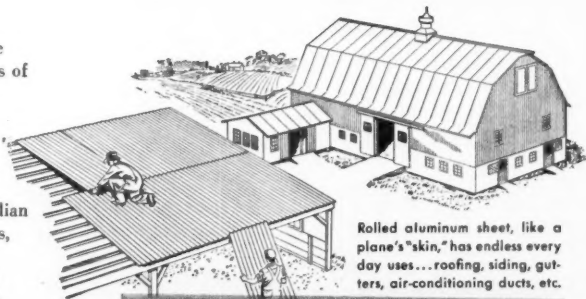
Most of the frame and thousands of the working parts of a plane are aluminum...the metal that accounts for more than two thirds of a bomber's weight. So it takes tremendous quantities of aluminum to spread America's wings wherever the defense of Freedom requires. And to this vast demand must be added aluminum for rocket tubes, for PT boats and radar towers, for pontoon bridges and mobile kitchens.

The military uses of aluminum grow as dramatically as its civilian uses. People prefer light, strong, rustproof aluminum for windows, gutters, farm roofing, irrigation pipe, air-conditioning ducts. Manufacturers as well as consumers find premium advantages in aluminum parts for automobiles, refrigerators, washing machines. And the "kitchen engineers" of America await the return of their own pure aluminum household foil...Reynolds Wrap.

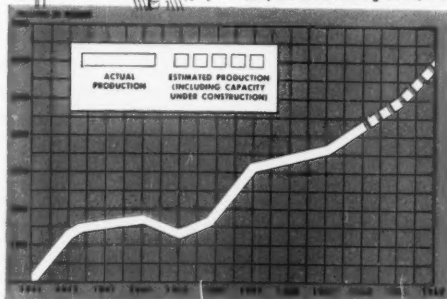
Production capacity is being rapidly expanded, to meet military needs first and to increase civilian supply. We all face a double job: fighting shortages and inflation while we fight aggression. Reynolds is working at that double job full time, full speed. Reynolds Metals Company, General Sales Office, Louisville 1, Ky.

Reynolds Wrap is now "all out" for defense

...Return Flight
Guaranteed!



Rollled aluminum sheet, like a plane's "skin," has endless every day uses...roofing, siding, gutters, air-conditioning ducts, etc.



Expanding aluminum production of Reynolds Metals Company.



REYNOLDS ALUMINUM

INTERNATIONAL OUTLOOK

BUSINESS WEEK

JULY 21, 1951

A
BUSINESS
WEEK

SERVICE

There's a new sign of a shift in Soviet strategy.

First came Malik's Korean truce bid. Now Moscow has started publishing an English-language magazine, "News," that calls for friendly relations with the U. S. and Britain. (The magazine is getting publicity inside Russia.)

In the first issue of "News," there's an article on Soviet-American friendship by Troyanovsky, first Soviet ambassador to the U. S.

The Kremlin has used this technique before when Stalin wanted to promote better relations with a foreign power.

Probably it will be several months before you can be sure what Moscow's game is. Chances are that Stalin has decided to try talking things out with the West, instead of shooting them out.

However, Washington still isn't counting on this. U. S. officials have some evidence that could point in the other direction:

(1) The continued increase of Communist ground forces in Korea and Red air strength in Manchuria.

(2) Chinese activity near the Indio-China border. The Reds are feverishly building airstrips and improving road and rail transport.

(3) A report reaching U. S. intelligence, purporting to give details of a Russian plan to invade Western Germany in August.

French diplomats are in a dither over the U. S. bid for a military alliance with Spain.

Paris thinks (and London agrees) that such an alliance will cost the U. S. more than it's worth. French officials say that a tieup with the Franco dictatorship will hurt the West morally. Also that any surplus U. S. cash could be better spent to strengthen our present allies.

The French are almost as upset by the U. S. push for peace settlements with Germany and Japan. They don't think we'll be able to control either of our ex-enemies once occupation controls end.

The British take a dim view of the Harriman mission to Iran.

London feels that Harriman can't get an oil agreement with Premier Mossadeh unless the U. S. is ready to scuttle British interests. All the visit does is strengthen Mossadeh's hand.

That just delays the development the British are waiting for—a split among Mossadeh's followers serious enough to produce a government that's willing to negotiate. British compromise proposals have been readied for this occasion.

Meanwhile, the fur flies between Washington and London. Americans blame the Anglo-Iranian Oil Co. for being too stubborn. The British blame U. S. Ambassador Grady and independent U. S. oil men for encouraging Mossadeh to take over Anglo-Iranian. (The Iranians claim that California oil interests have offered to send 2,000 technicians to Iran.)

The upcoming meeting of the North Atlantic Treaty Organization in Ottawa is in for a lot of economic disaster talk from Britain and France.

The Anglo-French position will be this: Rearmament will wreck our economies—unless there's a better international allocation of raw materials and some check on prices.

Britain's Chancellor Gaitskell and France's Petsche (ex-finance minister) agreed to take the joint stand at a recent top-level session of the Organization for European Economic Cooperation. The other ERP nations went along.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

JULY 21, 1951

What worries the British is the new threat to its balance of payments and dollar reserves.

It looks now as if (1) British exports won't come close to paying for imports this year; and (2) the sterling area will lose rather than gain dollars.

So far, Britain's trade deficit has little direct connection with its own rearmament. It's due almost entirely to the high prices of imported raw materials.

Gaitskell will tell Parliament next week that civilian imports may have to be cut soon to save the arms program.

•
France's big worry is the rise in living costs.

Inflation has plagued France more than any other Western European nation. The cost of living last month was 24% above June, 1950.

It's unlikely, though, that France's new government—due to be formed this week—will meet the problem head on. The middle-of-the-road parties are badly split on what to do.

•
The U. S. Commerce Dept. is fretting over the world raw materials problem, too.

Commerce officials say the U. S. should pull in its belt a lot more. Otherwise, foreign nations won't get the stuff they need for rearmament.

Foreign needs are a long way from being filled today. Granting of export quotas lags 30% to 50% behind requests; filled orders are 60% to 70% behind.

•
Many foreign requests are for U. S. equipment to be used in vital projects—with a big payoff in strategic items.

Commerce Dept. officials warn that we will have to expedite such orders or suffer a shortage of raw materials.

For example, Mexico isn't getting enough rails for a railway modernization program. That makes it tough to ship out the Mexican metals the U. S. needs. So Commerce's Office of International Trade is set for a showdown with domestic railroads to get the Mexicans their track.

•
The threat of a new British dollar shortage is bad news for Hollywood.

U. S. movie men expect to earn \$35-million to \$40-million in Britain for the year ending in September. The problem is to get the money out.

Under the present agreement, which runs out in two months, Hollywood can remit only \$17-million a year (plus a possible extra \$4-million). The rest has to be invested in Britain.

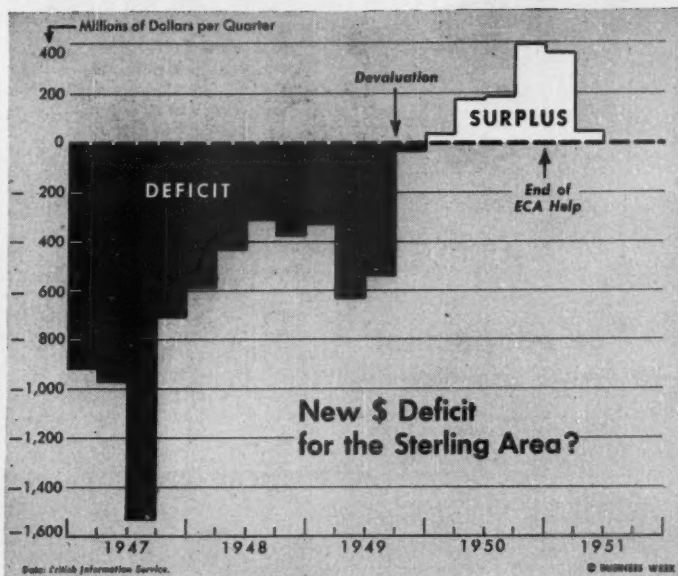
The American Motion Picture Assn. is angling now for a better deal. The AMPA started with the idea of asking for full convertibility. But there's a good chance that it will try to settle for \$25-million.

•
Look for the AFL and CIO to throw more weight around in the foreign policy field.

AFL and CIO delegates will come back from the Milan conference of the International Confederation of Free Trade Unions with this demand: Any further U. S. economic aid to Europe must be spent so that more benefit percolates down to the workers.

U. S. labor leaders also have plans for a bigger campaign of their own to strengthen European trade unions and help anti-Communist labor movements in Asia.

BUSINESS ABROAD



HUGH GAITSKELL'S midyear report on British Exchequer shows dwindling dollar surplus for the sterling area. A growing . . .

New Dollar Gap May Cripple Britain

The dollar gap once again is threatening Britain and the sterling area. So far, the trouble isn't critical; it may yield to self-treatment. But it has Washington and London really worried: A widening dollar deficit could really cut the heart out of Britain's effectiveness as our No. 1 ally.

• **Price Changes**—Here's the trouble, in simplest terms:

- The prices of things Britain and the sterling countries have to buy with dollars are going up.

- The prices of the things they sell to dollar countries are sagging; some have dropped seriously.

That's enough to change the meager dollar surplus in the second quarter (chart) into a ballooning deficit for the rest of the year. That's without counting possible loss of revenues from Iran's oil. That loss could mean as much as \$1-billion yearly to the sterling area as a whole.

Britons know the remedy only too well: tighter controls, less goods on the shelves, more austerity. For the rest of the world, the prospect of a dollar deficit means an end to talk of revaluing sterling. There will be no relaxation of annoying exchange restrictions; instead, there will be tighter controls on sterling area imports. For the U.S. taxpayer, there's always the chance of more aid

to Britain if the situation gets worse.

- **Reserves**—Chancellor of the Exchequer Hugh Gaitskell (picture) broke the bad news in his midyear economic report. In the second quarter Britain managed to eke out a paltry \$54-million surplus; gold and dollar reserves climbed \$109-million to a comfortable \$3,867-million. But that's only a trickle compared to the vigorous recovery since late 1949 (BW—Dec. 23 '50, p. 69). It promises trouble ahead.

- **Overseas**—The troubles are partly the problem of the sterling area as a whole, partly of Britain alone. For the overseas sterling nations, the post-Korea boom in raw materials like tin, rubber, and wool brought money rolling in, swelling dollar reserves tremendously. But a sharp fall in prices of the materials since April has cut deeply into the take. The price of Australia's crossbred wool—which had a meteoric rise—is now down by half from the peak price.

Meanwhile, with earlier restrictions lifted, the sterling area has raised its dollar imports.

- **Homeland**—Britain itself has dollar problems that are dragging it down faster than the sterling area as a whole. ECA aid to Britain has officially ended; receipts from last year's allocations are fast ebbing. There's a slump in dollar receipts from the European Payments

Union. Iran spells more trouble: Chancellor Gaitskell figures that the dollar cost of replacing Iranian oil would be \$350-million annually.

What's more, Britain has troubles with its over-all balance of payments—its total trade with all nations of the world, not just the dollar areas. The terms of trade have gone more sharply against Britain than anyone expected: In May imports cost 42% more than a year ago, while exports only brought in 18% more. It all adds up to a trade gap of £404-million in actual merchandise trade. Invisible earnings—from services, investments—aren't nearly enough to make up the difference.

- **More Controls**—London planners say the only way to cure the dollar gap—and the trade imbalance—is to push exports. That means screwing on more controls, diverting more and more goods to export markets. There's not much hope of boosting production enough to take care of consumers, defense requirements, and exports all at once.

The added controls will cause new shortages, hitting harried Britons just when they've come up for air. Last year's spectacular improvement in Britain's economic position sent householders scrambling for clothing, home furnishings, durable goods that had been unavailable while Britain climbed the



Step up production—put the "Series 700" 'Load Lifter' Electric Hoist to work!

It's fast—lifts a ton 30 feet a minute. *It's efficient*—incorporates 65 years of know-how in building load-handling equipment exclusively. *It's safe*—has steel suspension; safety-type lower block and hook; only 24 volts at the push button. *It's dependable*—load and motor brakes adjust themselves; helical gears are heat-treated; ball bearings throughout.

The 'Load Lifter' can boost output, lower costs—for you. Write for Bulletin No. 399.



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Warren Steel Specialties Corp.
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You advertise in Business Week when you want to influence management men

recovery road. So far this year personal consumption is up 5% even though Britons were warned they'd have to cut spending 5% during 1951 to pay for rearmament.

• **Hard Goods**—True, production has shown a healthy rise in tractors, machine tools, engines, shipbuilding, textiles. But these are mostly the defense and other hard goods industries.

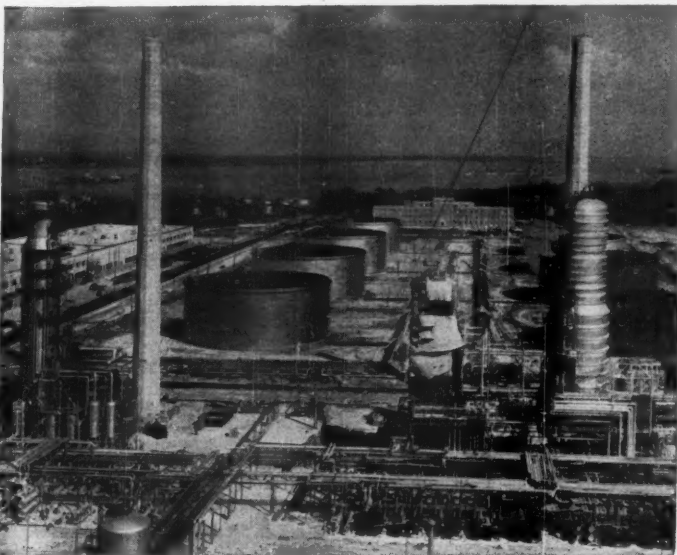
The power problem is tying down the whole British economy. Coal mines are producing 3% more than last year, but consumption is up 4%. Postwar industrial expansion has outrun the capacity of the utilities.

Though world market conditions are more to blame than Britain's internal policies, U.S. officials are apt to lay some of the blame at London's doorstep. They think Britain should have torn out some of the creaking structure of controls during the breather they got last year when trade was nearly in bal-

ance and reserves were growing. That might have released the inflationary pressures that the Labor government has been repressing since the war, giving the economy more flexibility to meet the present problems.

• **Trouble Ahead**—Now controls are necessary. If they don't work and Britain must use up its reserves to stay in business, the prospect is real trouble. Another devaluation is ruled out; and no one in London has mentioned more U. S. aid, always a possibility.

Actually, the British people are ready to take austerity. The political effect of the worsening external trade position is a paradox. With world prices sagging and with tighter controls in prospect, it will be easier for Britain to hold internal prices down. Rising retail prices have infuriated Britons more than anything else. If the cost of living drops even slightly, they'll support the Labor government, even if they get fewer goods.



British Refinery Will Make Up for Iran Loss

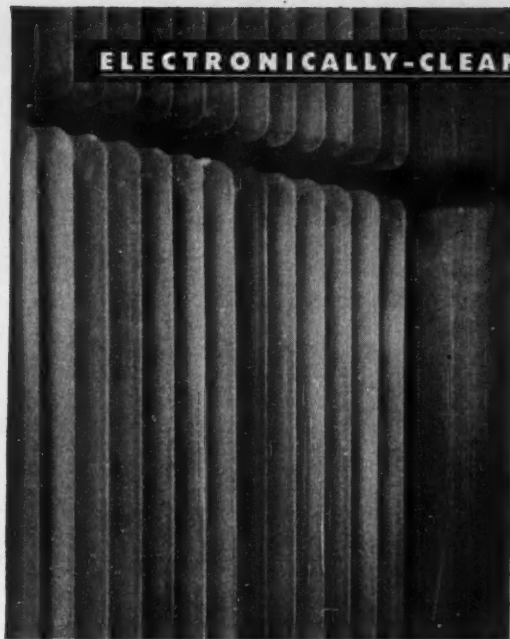
Faced with loss of Abadan, the world's largest oil refinery, Great Britain still has this ace in the hole. Esso Petroleum Co.'s giant \$100-million refinery at Fawley, England, near Southampton, will be "on stream" as early as August or September, six months ahead of the target date.

In its first year, Fawley is expected to produce 5.5-million tons of gasoline, bunker fuel, jet fuel, naphtha, asphalt, lubricating oils, kerosene. That's around a quarter of Britain's annual requirements and more than twice the 2.5-million tons of refined products imported from Iran.

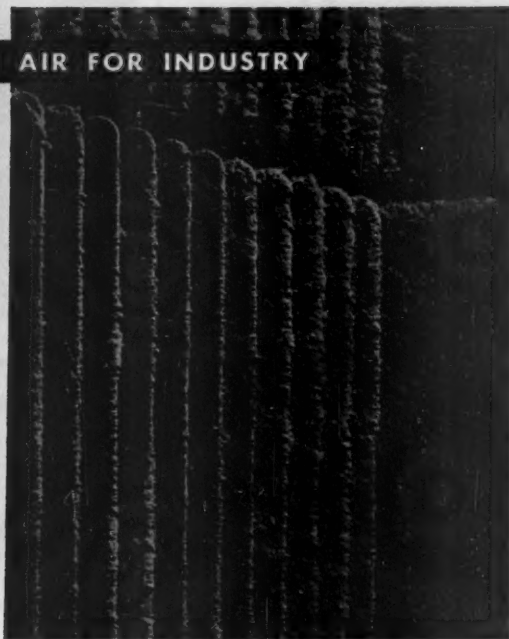
Britain is building new refining capacity at breakneck speed. Fawley is a good example. Two years ago the first tree fell on that site; now the place is a silver forest of furnaces, towers, condensers, reactors—plus piers, workshops, living quarters for personnel. The British government hurried up the job through special priorities.

The British have \$350-million tied up in refinery expansion. Self-sufficiency in refined products is in sight, perhaps by 1954. That would mean about 23-million tons—a far cry from Britain's meager output of 4.5-million tons back in 1948.

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Precipitron® — ELECTRONIC BARRIER AGAINST INVISIBLE DIRT

Air that's "fit to breathe" *isn't* clean enough. A particle of invisible air-borne dust, no larger than 1/100,000 of an inch, can create an image on a bombsight behind which a battleship might hide. Minute corrosive particles will mar the super-finished surface of a vital engine part. Contamination by bacteria-carrying specks is dangerous in hospitals, laboratories or food processing plants. In industrial and commercial buildings, in industrial processes, in communication centers, stores, offices, and even the home—dirt is costly everywhere.

But PRECIPITRON—the electronic air cleaner—will take *all* the dirt out of the air, down to particles so tiny that they can be seen only with an Ultra Microscope!

If you wish to add electronic air cleaning to your present systems—or if you wish to *put air to work* with Sturtevant air handling or air conditioning apparatus incorporating electronic air cleaning—contact your local Westinghouse-Sturtevant Office; or write Westinghouse Electric Corporation, Sturtevant Division, Hyde Park, Boston 36, Massachusetts.

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OIL MIST CONTROL



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**THERE'S A PYRENE
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Vaporizing liquid, air foam, chemical foam, cartridge-operated and other types; manual and automatic systems. See your Pyrene® jobber!



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Affiliated with C-O-Two Fire Equipment Co.

Do Your Employees Read The Wrong Literature?

Employee relations executives agree much of the literature employees read distorts their thinking about business. And literature distributed by the payroll enclosure method is often labeled "propaganda."

A Solution to the Problem—To meet the problem, N. R. B. is establishing Information Rack Centers in plants and commercial establishments across the country. Through this method employees select literature on a voluntary basis. Positive thinking is developed.

The free booklet, *How to Strengthen Employee Relations With Information Rack Centers*, explains how you may profit from this successful program. Send for it today.

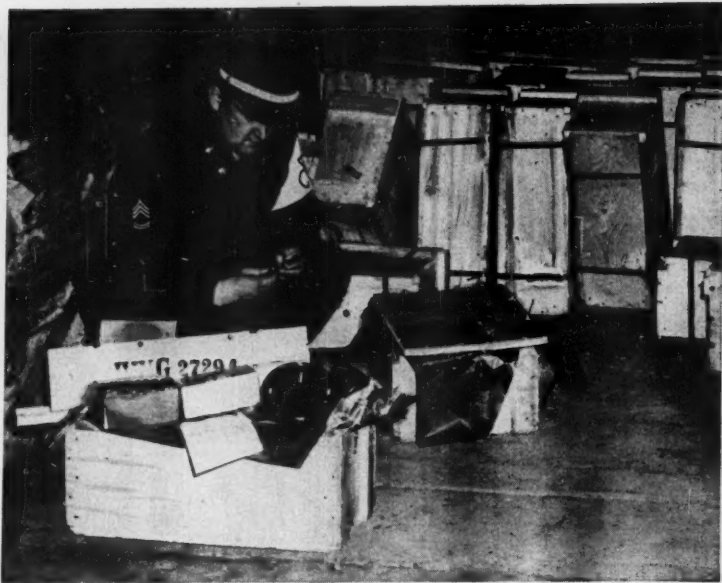


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MILITARY POLICE at German-Czech border check carload of bearings, to make sure they didn't originate in West Germany. Bill of lading says they came from Belgium.

Here's One Illegal Shipment

Switzerland

Czech border, U.S. Zone

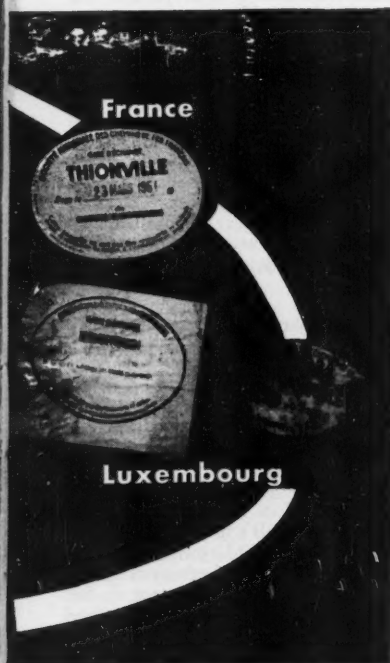
This freight car, loaded in Belgium with German goods, found its way to...

THE LONG WAY: The Schweinfurt firm had slipped bearings to an agent in Antwerp, who trip around Europe. Eager Czech officials had already slapped customs stamp on car before



BALL BEARINGS concealed this slip, which proved they really came from a German manufacturer at Schweinfurt. Germans paid the freight in advance to Prague, Czechoslovakia.

That Didn't Reach the East



stashed them in a Belgian freight car for the U. S. MP's held it up.

These pictures show one West-to-East shipment of strategic materials that didn't get through. But plenty more have, and each boosts Communist war-making potential another peg.

A West German firm is the offender in the complex ball bearing case. Here's the story: U. S. officials can halt West German exports to the East of any items deemed "strategic" by the Allied High Commission in Germany. But if the shipment had actually originated in Belgium, as the phony documents tried to prove, the MP's couldn't have touched it. That's because Belgium, and some other Western nations, have different lists of what's strategic and what isn't.

• **Machine Tools**—By illegal transshipment deals like this one, and through legal exports of more lenient countries, Soviet bloc nations are receiving millions of dollars worth of bearings, machine tools, drugs, heavy industrial and mining equipment.

This West-to-East trade has roused the U. S. Congress, brought the Kem amendment designed to ban any U. S. aid to nations that send strategic items through the Iron Curtain (BW-Jun. 2'51,p137). There's also a new U. S. ban on certain exports to any West German firm that breaks the rules—like the Schweinfurt outfit.

Recently, our Allies have promised

Low first cost...

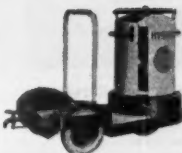
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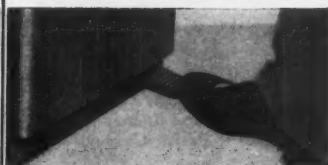
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to patrol their eastern trade more carefully. But they don't feel they can stop sending machinery and manufactures entirely. They desperately need raw materials, sent by the East in return, that are virtually unobtainable elsewhere. It's a question of who gets more out of any Iron Curtain trade—West or East.

BUSINESS ABROAD BRIEFS

Chase National Bank, New York, has plans for an investment bank in Brazil, to help finance new industrial ventures there. Capital will be \$5-million.

Oil world: Iraq Petroleum Co. (U.S., British, French, and Dutch owned) has hammered out a 50-50 profit-sharing arrangement with the Iraqi government. The Iraqis will be paid off in crude oil, not currency. . . . A new oil well in Ecuador—to produce 440-bbl. daily—has been brought in by Manabi Exploration Co., affiliate of Canada Southern Oils, Ltd. It's Manabi's first drilling project in the El Tigre field in southern Ecuador. . . . Some 120 West German oil technicians have applied to the Iranian Consul General in Hamburg for work in Iran's oil fields. No applications have been received from East Germany, say the Iranians. . . . Saudi Arabia, biggest oil producer in the Middle East, hit a new high last month. Arabian American Oil Co. says crude production came to 758,705 bbl. daily, up from the previous record of 739,780 bbl. daily in May.

The Swiss are showing new interest in Canada. Switzerland's largest commercial bank, the Swiss Bank Corp., has set up a "Swiss Corp. for Canadian Investments, Ltd." at Montreal, to act as dealers in investments and as a general financial agent. Operations begin next month.

A sulfur splitup was arranged by the International Materials Conference in Washington last week. Allocation this quarter will go to 22 nations—ranging from 600 tons for the Netherlands to 1,050,000 tons for the U.S. and Canada. Total working supply for the IMC is 1,415,000 tons.

Israel opened its first steel pipe plant south of Acre. It's run by the Middle East Tube Co., Ltd., owned half-and-half by a Chicago businessman and Solch Boneh, contracting agent of the General Confederation of Jewish Labor in Israel. The new plant represents the first instalment on a Solch Boneh Steel Works, which some day will include steel rolling mills, iron foundries, and electric smelting furnaces.

Drying Wetbacks

U.S., Mexico to discuss regulating legal flow of labor into Southwest and curbing illegal entries.

Every year an estimated 1-million Mexican laborers sneak across the U.S. border to find jobs. In recent years, many other thousands have crossed legally, under an intergovernmental agreement. Mexico has charged bitterly that a huge number of both legal and illegal laborers work under conditions about one jump ahead of slavery.

The situation has been a sore spot in U.S. Mexican relations. This spring Mexico refused to renew the agreement for legal admission of immigrants unless the U.S. did something to improve conditions. Farmers in the Southwest howled with anguish; cotton growers, especially, headed straight for a record crop, desperately needed Mexican labor.

• **Legislation**—To satisfy the farmers, Congress passed the Ellender-Poage bill, which is designed to improve the lot of Mexican workers and to cut down on the flow of wetbacks (illegal immigrants). But heavy counterpressure came from AFL and CIO leaders. They charged that the bill would permit Mexican labor to depress living standards in the Southwest and that it was not stiff enough to prevent hiring of wetbacks.

Last week President Truman found the need for cotton labor, and for good relations with Mexico, stronger than the demands of labor. He signed the Ellender-Poage bill. This week U.S. emissaries are expected to fly to Mexico City to negotiate a new agreement. There probably won't be much difficulty, since the Ellender-Poage bill has met most of the Mexican protests. Terms of the agreement will fit into the framework created by these main provisions of the bill:

- The U. S. Labor Dept. will set up recruiting stations in Mexico and reception centers for immigrants here.
- The Labor Dept. will pay for transport, food, medical care of immigrants in transit. U.S. employers would reimburse the government \$15 a head for Mexicans hired.
- The U.S. will assist the immigrants to negotiate contracts with employers in the Southwest and will guarantee that the employer fulfill the terms.
- Employers who hire wetbacks will be ineligible to hire legal labor.
- Immigrants will be exempt from social security and income taxes.

ADVERTISERS IN THIS ISSUE

Business Week—July 21, 1951

AEYNA LIFE AFFILIATED COMPANIES...	86	THE INTERNATIONAL NICKEL CO., INC...	19
AIR EXPRESS DIV. RAILWAY EXPRESS		Agency—Marshall & Pratt Co.	
AGENCY, INC.	31	JENKINS BROS.	10
Agency—Robert W. Orr & Assoc., Inc.		Agency—Horton-Noyes Co., Adv.	
ALENITE DIV. OF STEWART WARNER...	53	JONES & LAMSON MACHINE CO.	55
Agency—Walker & Downing, General Agency		Agency—Henry A. Loudon Adv., Inc.	
ALLEGHENY LUDLOW STEEL CORP.	8	KELVINATOR WATER COOLERS...	76
Agency—MacFarland, Averard & Co.		Agency—Geyer, Novell & Ganger, Inc.	
AMERICAN CAN CO.	81	KROPP FORGE CO.	54
Agency—Young & Rubicam, Inc.		Agency—Advertising Producers Assoc. of Inc.	
AMERICAN SURETY GROUP...	68	THE LAMB ELECTRIC CO.	6
Agency—Albert Frank-Guenther Law, Inc.		Agency—The Bayless-Kerr Co.	
AMERICAN TELEPHONE & TELEGRAPH CO.	5	LAMSON CORP.	49
Agency—N. W. Ayer & Son, Inc.		Agency—Barlow Adv., Inc.	
BALTIMORE & OHIO RAILROAD...	61	MANNING, MAXWELL & MOORE, INC.	122
Agency—The Richard A. Foley Adv. Agency, Inc.		Agency—Fuller & Smith & Ross, Inc.	
BANKERS BOX CO.	58	MANZEL	62
Agency—Crawford & Dangler, Inc.		Agency—Baldwin, Bowers & Strachan, Inc.	
BANKERS TRUST CO.	1	MARINE MIDLAND TRUST CO. OF N. Y.	33
Agency—Crawford & Dangler, Inc.		Agency—Batten, Barton, Durstine & Osborn, Inc.	
BARUM STEEL CORP.	12-13	McGraw-Hill Publishing Co., Inc.	116-117
Agency—James Thomas Chiruga Co.		MEAD CORP.	6
BETHLEHEM STEEL CO.	47	Agency—Gray & Rogers, Adv.	
Agency—Jones & Brinkley, Inc.		MECHANICAL HANDLING SYSTEMS, INC.	52
BOWER ROLLER BEARING CO. 2nd Cover		Agency—Witte & Burden	
Agency—MacManus, John & Adams, Inc.		MELINK STEEL SAFE CO.	104
BROWN & ROOT, INC.	2, 44	Agency—W. B. Deane & Co.	
Agency—Lathin-Wilson-Haxter & Persons, Adv.		METALS & CONTROLS CORP.	
CHARLES BRUNING CO., Inc.	77	SPENCER THERMOSTAT DIV.	90
Agency—G. M. Bradford Co.		Agency—Sutherland-Abbott Adv.	
BRUNNER MFG. CO.	56	THE MINNEAPOLIS & ST. LOUIS RAILWAY	82
Agency—Comstock & Co.		Agency—Addison Lewis & Assoc.	
BURROUGHS ADDING MACHINE CO., INC.	87	MOBILITE CORP.	4
Agency—Camden & Co.		Agency—Allen & Clinebaugh	
CARRIER CORP.	89	MOSINEE PAPER MILLS CO.	93
Agency—N. W. Ayer & Son, Inc.		Agency—Klaus Van Peterson-Dunlap Assoc., Inc.	
CENTRAL PAPER CO., Inc.	122	MYSTIK ADHESIVE PRODUCTS...	197
Agency—Richard H. Brady Co., Inc.		Agency—George H. Hartman Company	
CHICAGO RAWHIDE MFG. CO.	96	NATIONAL RESEARCH BUREAU	124
Agency—Weisley Aves & Assoc.		Agency—Frederic R. Kleiman	
CITY BANK FARMERS TRUST CO.	103	OKLAHOMA PLANNING & RESOURCES	
Agency—Kennedy Binkshire, Inc.		BOARD	78
CLEARING MACHINE CORP.	70	Agency—White Advertising Agency	
Agency—Griffin & Co.		THE OSBORN MANUFACTURING CO.	67
COLD METAL PRODUCTS CO.	42	Agency—The Griswold-Eshleman Co.	
Agency—H. M. Kilgus-Smith Co.		OWENS-ILLINOIS GLASS CO. KAYLO DIV.	51
COLORADO FUEL & IRON CORP.	113	Agency—Kwell & Thurber Associates	
Agency—Dwyer, Kitchin & McCormick, Inc.		PACIFIC INTERMOUNTAIN EXPRESS	104
CONSOLIDATED WATER POWER & PAPER		Agency—Erlacher, Wheeler & Staff	
CO. AHDWAGAM DIV.	38	PEASE WOODWORK CO.	109
Agency—Richard H. Brady Co., Inc.		Agency—Guenther, Brown & Borne, Inc.	
CORNING GLASS WORKS	79	H. K. PORTER COMPANY, INC.	
Agency—Charles L. Rumrill & Co., Inc.		(QUAKER RUBBER DIV.)	74
C-O-TWO FIRE EQUIPMENT COMPANY	30	Agency—The Albert P. Hill Co., Inc.	
Agency—G. M. Bradford Co.		PYRENE MANUFACTURING CO.	124
CROWN CAN CO.	43	Agency—Gray & Rogers	
Agency—The Clements Co.		RAMSEY FASTENERS, INC.	86
DAILY MACHINE SPECIALTIES, INC.	20	Agency—Fuller & Smith & Ross, Inc.	
Agency—Waldie & Briggs, Inc.		REEVES PULLEY COMPANY	110
DAVISON CHEMICAL CORP.	20	Agency—Caldwell, Larkin & Company, Inc.	
Agency—St. George & Co.		RELIANCE ELECTRIC & ENGINEERING	100
E. I. de PONT DE NEUMOURS & CO.	7	Agency—Meldrum & Fowmuth, Inc.	
Agency—Batten, Barton, Durstine & Osborn, Inc.		REYNOLDS METALS CO.	118
DUREZ PLASTICS & CHEMICALS, INC.	41	Agency—Buchanan & Co., Inc.	
Agency—Comstock & Co.		ROBBINS & MYERS, INC.	76
EASTERN CORP.	76	Agency—Erwin Wasey & Co., Ltd.	
Agency—Sutherland-Abbott		ROGERS CORP.	99
EASTMAN KODAK CO.	45	Agency—The Charles Brunelle Co.	
Agency—Charles L. Rumrill & Co., Inc.		RUST-OLEUM CORP.	97
ELJER CO.	56	Agency—Glenn, Jordan, Stotzel, Inc.	
Agency—Fuller & Smith & Ross, Inc.		IOS. T. RYERSON & SON, INC.	29
Agency—J. M. Mathis, Inc.		Agency—Aubrey, Moore & Wallace, Inc.	
THOMAS EMERY'S SONS, INC.	114	SKF INDUSTRIES, INC.	69
Agency—Rutledge & Ryan, Inc.		Agency—G. S. Tyson & Co., Inc.	
EVANS PRODUCTS CO.	85	SLICK AIRWAYS, INC.	111
Agency—Fuller & Smith & Ross, Inc.		Agency—The Caples Company	
FEDERAL ELECTRIC PRODUCTS CO.	46	SOCONY-VACUUM OIL CO., INC. 3rd Cover	
Agency—Beatty & Oliver, Inc.		Agency—Compton Adv., Inc.	
FRUEHAUF TRAILER CO.	75	TENNESSEE PRODUCTS & CHEMICAL	
Agency—The Allman Co., Inc.		CORP.	55
H. B. FULLER CO.	114	Agency—The Griswold-Eshleman Co.	
Agency—Olmstead & Foley, Adv.		TINKEN ROLLER BEARING CO. 4th Cover	
GENERAL ELECTRIC CO.	71	Agency—Batten, Barton, Durstine & Osborn, Inc.	
Agency—G. M. Bradford Co.		TRAVELERS INSURANCE CO.	66
GENERAL ELECTRIC CO. (AIR CONDITIONING DEPT.)	126	Agency—Young & Rubicam, Inc.	
Agency—Kenyon & Eckhardt, Inc.		ALBERT TROSTEL & SONS CO.	59
GLAS-KRAFT, INC.	111	Agency—The Cramer-Krasselt Co.	
Agency—Meissner & Culver, Inc.		TYLER FIXTURE CORP.	73
THE GLIDEN CO.	14	Agency—Jones & Taylor & Assoc.	
Agency—Young & Rubicam, Inc.		UARGO, INC.	115
GLOBE AUTOMATIC SPRINKLER CO., INC.	106	Agency—The Buchen Co.	
Agency—Marchall & Pratt Co.		UNITED-CARR FASTENER CORP.	60
GLOBE HOIST CO.	96	Agency—H. B. Humphrey, Alley & Richards, Inc.	
Agency—Altink-Kynett Co.		UNITED GAS PIPE LINE CO.	3
GLOBE UNION, INC.	112	Agency—Bozell & Jacobs, Inc.	
Agency—Klaus Van Peterson-Dunlap Assoc., Inc.		U. S. STEEL CORP.	35, 91
GRAYBAR ELECTRIC CO.	57	Agency—Batten, Barton, Durstine & Osborn, Inc.	
Agency—G. M. Bradford Co.		WARD LEONARD ELECTRIC CO.	34
GULF OIL CORP.	11	Agency—James Thomas Chiruga Co.	
Agency—Young & Rubicam, Inc.		THE WARREN STEEL SPECIALTIES CO.	122
HAMMERMILL PAPER CO.	101	Agency—Meek & Thomas, Inc.	
Agency—Batten, Barton, Durstine & Osborn, Inc.		WELLINGTON SEARS	2
HARDWARE MUTUALS	39	Agency—Ellington & Company	
Agency—Roche, Williams & Cleary, Inc.		WELLMAN ENGINEERING CO.	36
HARNISCHFEGGER CORP.	64-65	Agency—The Griswold-Eshleman Co.	
Agency—The Buchen Co.		VESTINGHOUSE ELECTRIC CORP.	123
HARTFORD FIRE INSURANCE COMPANY		Agency—Fuller & Smith & Ross, Inc.	
HARTFORD ACCIDENT & INDEMNITY CO.	90	WOLVERINE TUBE DIVISION	37
Agency—Cunningham & Walsh, Inc.		Agency—Charles M. Gray & Assoc.	
HORDER'S, INC.	106	THE YODER CO.	62
Agency—Frank C. Jacob Advertising		Agency—G. M. Bradford Co.	
HYSTER CO.	125	YOUNGSTOWN SHEET & TUBE CO.	105
Agency—Simon & Smith, Adv.		Agency—The Griswold-Eshleman Co.	

Industry Blueprints a Big Future

There's this unusual fact about the present lull in the business boom: Despite a dullness in retail sales and mounting inventories, spending by business for plant and equipment is barreling along at breakneck speed.

This isn't exactly the way things are supposed to happen, according to the economics books. Business slowdowns are usually triggered off by the approaching end of capital expansion programs. That's what the most widely accepted theories of the business cycle say.

But the results of the spot check just made by BUSINESS WEEK of industry's capital spending plans don't fit the old formula (BW—Jul.14'51,p21). They show expansion over last January's record-breaking \$23-billion of planned plant and equipment expenditures in 1951.

Next to the mounting defense outlays themselves, this capital spending is the most dynamic fact in the economy today. And it sheds some light on what may be around the economic corner.

- The expanded spending programs for plant and equipment must of necessity carry well over into 1952. Many of the firms queried by BUSINESS WEEK talked of plans for 1952 as big as those now on the books. All this means one thing: A powerful prop to a high-income, high-employment economy for a good part of next year is already in position.

- The survey suggests that stout optimism prevails among the bulk of American industrialists about the future of the economy. Almost no company in the canvass expressed fear that its industry was getting overbuilt. A few saw the possibility of too much capacity if the Russian danger miraculously melted overnight. But most industrialists felt their industry needed more capacity to catch up with the civilian demand for their products.

These reports from American industry are immensely heartening. For they deal with the real sinews of our economic strength—the tools of production. Right now, when we are operating our economy under pressure, added plant and equipment have a dual role: (1) to expand over-all output, and (2) to cut costs through higher productivity.

More goods help take the inflationary pressure out of shortages. Lower costs hold back the thrust to inflation by making lowered prices possible. In the end these factors overbalance the immediate inflationary consequences when resources are being used and paid for to turn out the capital goods that only later can get into production.

BUSINESS WEEK's survey reveals some holdups in translating expansion plans into reality because of badly devised controls in Washington. Some bugs in the capital goods price regulation, CPR-30, have already

been recognized and exterminated by OPS. The agency has started action on Charles Wilson's order to give special attention to the machine tool industry. The cardinal fact for OPS to keep in mind in writing price-control regulations for capital goods is this: It is dealing with something right near the heart of our economy's magic productivity. To ignore or tamper with that fact would cost us more than we can pay.

The Fed Stands Firm

The only way to curb credit is to curb it.

That's what the six-page letter from Federal Reserve Board Chairman William McC. Martin to the chairmen of the House and Senate Banking and Currency Committees boiled down to. Martin had been invited to comment on demands in both the House and Senate that consumer instalment credit control, Regulation W, be loosened up. He said "no" to the demands.

The board is acting wisely and courageously in standing up to the organized pressure for relaxing consumer credit curbs now. There is no doubt that the restrictions are hurting some automobile and other durable goods dealers and finance companies. Every restraint on inflation, if it is effective, is apt to hurt someone. Allocations of scarce materials, for example, are hard on the fellow who doesn't get them.

The Fed is right in refusing to ease up now on this sector of the anti-inflation front. And, if the board did so merely to appease its critics, it would cut the ground from under other credit controls. The tighter money policy dating to the unpegging of government securities would be imperiled. The Reserve System's voluntary credit restraint program would be a dead duck.

The Fed's stand deserves support.

Central Univermag

The glories of Moscow's biggest department store, Central Univermag, are detailed in a recent issue of the Communist Daily Worker.

Joseph Clark cabled his paper from world communism's capital, "At all times there are 20,000 different articles and types of goods in stock."

That's impressive to Clark. But in the Daily Worker's home town, New York City, one department store carries over 400,000 different articles, 20 times the offerings of Univermag.

Capping his tribute to the Soviet concern for consumers, Clark reports this remarkable item: "The Trekhgornaia textile combine, which isn't just satisfied to produce fabrics, also changes styles and provides great variety of colors and prints."

Shades of the decadent Western capitalists!

FIRST LINE OF DEFENSE

America's Great Production Machine—once again the arsenal of democracy—runs on oil and grease. And, among buyers of industrial lubricants, Socony-Vacuum is the *first-choice supplier*! Here's why...

Famous Gargoyle lubricants are unsurpassed in quality—constantly improved by Socony-Vacuum research. They are backed by 85 years of lubrication experience... are recommended by more machine builders than the products of any other oil company. Performance records, in thousands of plants, prove they help increase production, reduce friction and power losses, lower maintenance costs.

Socony-Vacuum—with more lubrication engineers serving industry than any other oil company—can help improve production performance in *your plant*. Why not give us a call?



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Correct Lubrication

WORLD'S GREATEST LUBRICATION KNOWLEDGE AND ENGINEERING SERVICE

SOCONY-VACUUM OIL COMPANY, INC., and Affiliates: MAGNOLIA PETROLEUM COMPANY • GENERAL PETROLEUM CORPORATION

Steel that makes horsepower out of hot air

An unusual locomotive that may usher in a new era of railroading has been built by the General Electric Company and is now being used in regular railroad service.

Unlike the steam and diesel-electric locomotives used up to now, it is powered by a gas turbine which is based on the principles used in aircraft jet engines. Air is compressed and heated to 1300°F. in a combustion system. It then expands rapidly against buckets attached to the rims of two gas turbine wheels, spinning the wheels at 6700 rpm.

This gas turbine drives a set of generators which supply current for electric motors.

They, in turn, drive the locomotive's wheels.

A major design problem was to find a steel for the turbine's high-speed wheel rims that would withstand the high temperatures without distorting.

General Electric engineers, drawing upon their vast experience in designing and building superchargers and jet engines for airplanes, selected "16-25-6", an amazing Timken stainless alloy steel that already had proved itself in rotor rims for aircraft jet engines.

When put to the test, "16-25-6" proved to be the answer. Even when spinning at supersonic speed in the hot gases, "16-25-6"

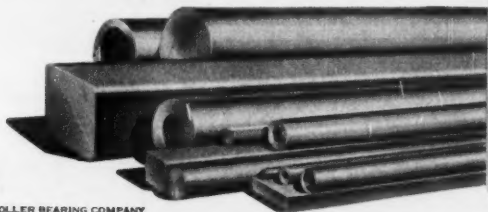
maintains its shape and securely holds the turbine buckets that develop the power.

Here is yet another unusual problem stamped: "Solved—by Timken Alloy Steel". No other alloy steel producer can point to so many tough problems solved.

The Timken Company offers a combination of research and experience that is unique in the industry. Perhaps we can help with your problems. Write The Timken Roller Bearing Company, Steel and Tube Division, Canton 6, O. Cable address: "TIMROSCO". Tapered Roller Bearings, Alloy Steels and Seamless Tubing, Removable Rock Bits.



YEARS AHEAD—THROUGH EXPERIENCE AND RESEARCH



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STEEL

and Seamless Tubes